

ESSAYS
AND
TREATISES

ON MORAL, POLITICAL, RELIGIOUS AND
VARIOUS PHILOSOPHICAL SUBJECTS

ESSAYS

AND

TREATISES.

VOL. II.

FROM THE GREEK BY THE TRANSLATION OF
THE REV. JAMES GREGG, D.D.

IN TWO VOLUMES.

LONDON:

1873

1873

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ESSAYS
AND
TREATISES
ON MORAL, POLITICAL, RELIGIOUS AND
VARIOUS PHILOSOPHICAL SUBJECTS.

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FROM THE GERMAN BY THE TRANSLATOR OF
THE PRINCIPLES OF CRITICAL PHILOSOPHY.

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ESSAYS

AND

THEATRES

ON MORAL, POLITICAL, RELIGIOUS AND
VARIOUS PHILOSOPHICAL SUBJECTS.

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FROM THE GIFT OF THE
THE PRINCIPLES OF THEOLOGY.

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30)

aspersions

* Would a certain author of *A Sermon on Suicide*, who makes this uncharitable and unchristianlike observation, — 'Of all men that ever lived Mr. Hume is the only one, of whom I never heard a single good and benevolent action,' — take the trouble to read a letter, prefixed to Hume's History

aspersions and declamation, instead of argument. Such conduct can admit of no apology or extenuation, and men of candour and discernment look upon it as disgraceful, not only to sacred offices, but to the rank in society of men of letters. In order to contrast this turpitude and to set it in a full light, I shall avail myself of the opportunity which the preface affords and quote a passage, not from a *theological* moralist, but from a *moral* theologian, of a very different cast of thought indeed, and the only person who has ever yet been able to subvert the reasoning of the British sceptic, (*opposita juxta se posita magis elucescunt*).

Since the Essays of Lock and of Leibnitz (says KANT in his PROLEGOMENA), or rather since the origin of metaphysic, so far as its history reaches, there has happened no event more decisive of the fate of this science, than the attack DAVID HUME made on it. He threw no light, it is true, on this species of cognition, but he struck a spark, by which, had

History of England, new ed. vol. 1. p. xxiii, from doctor Adam Smith to William Strahan esquire, either his own ignorance, or something worse, would stare him in the face. Doctor Smith says, 'Even in the lowest state of his (Hume's) fortune, his great and necessary frugality never hindered him from exercising, on proper occasions, acts of both charity and generosity.' How different is this from the judgment of that spiritual guide and orthodox preacher of the gospel! who will surely not dare to doubt doctor Smith's veracity. — The translator, were it necessary, would dwell, with pleasure, on the amiable and estimable qualities, with which the great Hume was adorned, which rendered him at once so agreeable, so interesting and so useful in society, and made him be both universally beloved and admired.

had it fallen upon a susceptible tinder whose glimmer could be carefully kept up and increased, a light might have been kindled.

Hume set out chiefly from a single but weighty conception of metaphysic, that of the *connexion of cause and effect* (therefore its consequent conception of power and action &c.), and summoned reason, who pretends to have begotten it, to give him an account, with what right she thinks that something may be of such a nature, that, when it is laid down, something else must thereby of necessity be likewise laid down; for this the conception of cause says. He proved irrefragably that to cogitate such a conjunction *à priori* and from conceptions, is totally impossible for reason; for that comprises necessity; but it is inconceivable, how, because something is, something else must necessarily be, and how the conception of such a connexion can be established *à priori*. Hence he concluded that reason quite deceives herself with this conception, and that she falsely holds it her own offspring, as it is nothing but a bastard of the imagination which, impregnated by experience, has brought certain representations under the law of association, and substitutes a subjective necessity, that is, custom, springing therefrom, in the room of an objective one from introspection. From this he inferred that reason has no faculty at all to think of such connexions, even but in the general, as its conceptions would in that case be mere fictions, and all its pretended cognitions subsisting *à priori*, but falsely

stamped experiences; all which signify that there neither is, nor can be, any metaphysic.*

However precipitate and wrong this consequence was, it was at least founded in investigation, and this investigation well-merited that the men of penetration and abilities in his time should have united themselves, to resolve the problem more happily, if possible, in the sense he propounded it; whence then must have soon arisen a total reform of the science.

But metaphysic, hitherto, has had the hard fate, to be understood by none. One cannot, without regret, reflect on the manner in which Hume's antagonists, Reid, Oswald, Beattie, and at last even Priestly too, missed the point of his problem and, while they constantly took for granted what he doubted, but on the contrary proved with vehemence and for the most part with great rudeness and immodesty that which never once occurred to him to doubt, so grossly mistook what he suggested for amendment, that every thing remained in the old state, as if nothing had happened. It was not the question, whether the conception of cause be right, useful and, relatively to the whole cognition of nature, indis-

* Hume named even this destructive philosophy itself metaphysics, and set a high value on them. Metaphysics and Moral, said he, are the most weighty branches of science; the Mathematics and Physics are not of half so much value. But the acute Hume perceived here the negative advantage merely, which the moderating of the exaggerated pretensions of speculative reason would be of, in order to terminate so many endless and persecuting contests, which distract mankind; he however lost sight of the mischief, which arises, when reason is deprived of the most important prospects, by which only it can set up to the will the highest aim of all its aspirations.

indispensable, for of these Hume never harboured a doubt; but whether it be thought *à priori* by reason, and in this manner have an internal truth independent upon all experience, and therefore a more extensive utility, which is not limited merely to objects of experience: on this head Hume expected information and, as he himself says, still kept his mind open to instruction, if any one would vouchsafe to bestow it on him.

The adversaries of this celebrated philosopher, however, must, in order to do justice to the problem, have penetrated very deep into the nature of reason, so far as it is occupied in pure thinking; which would have been rather irksome and incommodious to them. They therefore, without flying in the face of all insight, found a more convenient mean, the appeal to *common sense*. It is indeed a great gift of heaven to possess good (or, as it has been lately denominated, common) sense. But it must be evinced by facts, by what one thinks and speaks with reflection and rationally, but not appealed to as an oracle, when one has nothing reasonable or satisfactory to offer in his justification. When introspection, that is, cognition *à priori*, and science are put to the last shift, to appeal then and not sooner to common sense, is one of the subtile discoveries of modern times, whereby the most shallow prater may boldly cope and stand the brunt with a man of the most profound understanding. But while there is yet a small remain of introspection, one avoids having recourse to this last refuge

or help in need. And this appellation, narrowly inspected, is nothing else than an appeal to the judgment of the multitude; at whose applause the philosopher blushes, but in which the popular witling triumphs and exults. I should think, however, that Hume could lay claim to sound understanding, as well, at least, as Beattie, and besides, to what he never was endowed with, a critical reason, which sets bounds to common sense, that it may not lose itself in speculations, or, when merely these are in question, desire to decide any thing, because it understands not to justify itself with regard to its principles; for only in this manner does it remain sound understanding. The chisel and mallet may be quite sufficient to cut or even to carve a piece of wood, but the burine must be used for the purpose of engraving. Thus is a sound understanding, as well as a speculative one, useful, but each in its own way; that, when judgments, which have their immediate application in experience, are concerned, but this, when one must judge in the general, from mere conceptions, for instance, in metaphysic, where sound understanding, so naming itself, but often *per antiphrasin*, has no judgment whatever.

I (continues Kant) freely acknowledge that the hint, which David Hume dropped, was what first roused me from a dogmatic lethargy, in which I had slept during many years, and gave quite another direction to my inquiries in the field of speculative philosophy. I was by no means disposed to listen to him in
regard

regard of his consequences that proceeded merely from his not having represented to himself his problem on the whole, but only having hit a part of it which, without taking the whole into consideration, can give no light. When the beginning is made from a well-grounded though not an amplified conception, which another has left us, one may hope, by continual reflection, to extend it farther than the acute man, whom we have to thank for the first spark of this light.

I therefore tried first, whether Hume's objection could not be represented universally, and soon found That the conception of the connexion of cause and effect is by no means the only one, by which the understanding conceives connexions of things *à priori*, but rather that metaphysic consists of them entirely. I endeavoured to secure their number and, as this succeeded with me according to my wish, from one single principle, I proceeded to the deduction of these conceptions, of which I was now assured that they are not, as Hume apprehended, derived from experience, but spring out of the pure intellect. This deduction, which seemed impossible to my acute predecessor, and which, though every one boldly used the conceptions without inquiring upon what their objective validity bottomed, never entered into the mind of any body but him, was the most difficult that could ever be undertaken for the behoof of metaphysic, and the worst was that no metaphysic, so far as there was any extant, afforded me in this the smallest assistance, because
that

that deduction must first constitute the possibility of a metaphysic. As I had now succeeded in the solution of the Hume's problem not merely in a particular case, but with a view to the whole faculty of pure reason; I could take sure though never but slow steps, in order finally to determine completely and according to universal principles the whole circuit of pure reason, in its boundaries, as well as in its matter; which was what metaphysic stood in need of for the execution of its system according to a sure plan.

I suspect, however, that the execution of Hume's problem in its possible greatest extension (namely, the critic of pure reason) will have the same fate, as had the problem itself, when it was first represented: It will be falsely judged, because it is not understood; it will not be understood, because one may indeed turn over the leaves, but will never incline to study it thoroughly; and one will not take this trouble, because the work is dry, because it is obscure, because it clashes with all usual conceptions, and is over and above prolix. I own I did not expect complaints from philosophers on account of want of popularity, entertainment and ease, when the existence of a cognition, much esteemed and indispensable to humanity, is on the carpet, a cognition, which cannot be otherwise made out, than according to the strictest rules of a scholastic punctuality, on which in process of time popularity may indeed follow, but never can make the beginning.

Should one ask the cool dispassionate
Hume,

Hume, properly formed for the equipoise of judgment, What induced him to undermine by difficultly discovered doubts * the persuasion, so consolatory and useful to mankind, that their introspection of reason is sufficient to the maintaining, and to the determinate conception, of a Supreme Being? he would answer, Nothing but the design to advance reason in its self-cognition, and at the same time a certain indignation at the restraint that one inclines to lay on reason, by lording over it, and hindering it from making a sincere and open acknowledgment of its weaknesses which become obvious to it by the trial and examination of itself. Ask, on the other hand, Priestley, who is devoted to the principles of an empirical use of reason only, and averse to all transcendental speculation, What were his motives for pulling down two such pillars of all religion, liberty and the immortality of our soul (the hope of a future life is with him but the expectation of a miracle of resuscitation), Priestley, who is even a pious and a zealous teacher of religion; he could answer nothing else, than The interest of reason, which loses because one wishes to withdraw certain objects from the laws of material nature, the only ones that we know and can determine. It would seem unjust to decry the latter, who can unite his paradoxical asser-

* See KANT'S CRITIC OF PURE REASON, page 792, where Hume's perplexities and doubts are disentangled and cleared up. This work is not yet translated, and will be no easy task for him, who shall have the courage to undertake it.

tion with the design of religion, and to vex a well-meaning man, because he, the moment he quits his own province, natural philosophy, knows not what to have recourse to. But this grace must be alike granted to the no less well-minded and, as to his moral character, irreproachable Hume, who cannot quit his abstract speculation, because he holds, with reason, that its object lies totally without the pale of natural philosophy, in the field of pure ideas.

What is now to be done, principally with regard to the danger, which thereby seems to threaten the common weal? Nothing is more natural, nothing more just, than the resolution which ye have to take on that account. Only let these people alone; if they have talents, if they show a spirit of profound and new inquiry, in a word, if they possess but reason, reason always gains. If ye use other means, than those of an unconstrained reason, if ye call out high treason, call together, as if by an alarmbell, the commonwealth, which by no means understands such subtile elaborations, ye render yourselves ridiculous. For it is not at all the question, what is in this advantageous or disadvantageous to the common weal, but only, how far reason can carry its speculation abstracting from all interest, and whether one must reckon any thing in general on it, or rather even give it up in favour of the practical. Therefore, instead of attacking sword in hand, rather behold quietly from the secure seat of criticism this conflict, which must be painful to the combatants,
diverting

diverting to you and, with an issue certainly not bloody, must fall out beneficially to your introspections. For it is highly absurd to expect enlightening from reason, and yet to prescribe to it previously, to what side it must of necessity incline. Besides, reason is of itself so well tamed and limited by reason, that ye have no occasion to call the watch, in order to oppose civil resistance to that party, whose apprehended preponderancy seems dangerous to you. In this dialectic there is no victory, of which ye have cause to be apprehensive.

Even reason requires such a contest very much, and it is to be wished that it had been carried on sooner and with unlimited public permission. For a mature critic, on whose appearance all these controversies and variances must naturally drop, by the contesting parties learning to discover the illusion and prejudices which disunited them, would the sooner have taken place.

In human nature there is a certain impurity, which must, at last, like all that is derived from nature, contain a predisposition to good ends, namely, an inclination to conceal one's real sentiments and to display certain adopted ones that are held good and commendable. Beyond a doubt men have by this propensity, as well to dissemble, as to adopt an appearance advantageous to them, not only cultivated, but step by step in some measure moralised themselves, because no one could succeed by the colour of decency, honesty and modesty, therefore in the putative genuine examples of the
good,

good, which he saw around him, found for himself a school of amendment. But this predisposition, to endeavour to appear better than one is and to utter sentiments which one never entertained, serves but, as it were, provisionally, to extricate man from a state of rudeness, and to let him at first adopt the manner of the good, at least, which he knows; but afterwards, when genuine principles are once unfolded and adopted in the way of thinking, that falsity must by degrees be powerfully combatted, as otherwise it corrupts the heart, and allows not good sentiments to grow among the weeds of fair appearance.

I am sorry to perceive the very same impurity, dissimulation and hypocrisy in even the manifestations of the speculative cast of mind, wherein men have much fewer impediments and no disadvantage at all in freely and openly acknowledging their thoughts. For what can be more disadvantageous to introspections, than to communicate to one another mere thoughts adulterated, to conceal doubts that we feel contrary to our own asseverations, or to give a colour of evidence to arguments, which are not satisfactory to ourselves? As long, however, as merely private vanity instigates this secret trick (which is commonly the case in speculative judgments that have no peculiar interest and are not easily capable of an apodictical certainty), so long does the vanity of others resist with public assent, and matters at length are brought to that pass, whither pure mindedness and sincerity had brought them, though
much

much earlier. But where the commonwealth thinks that subtle reasoners machinate nothing less, than to shake the foundation of the public welfare, it seems not only more conformable to prudence, but more allowable, and even laudable, to aid the good cause by seeming grounds, than to leave its opiniative adversaries even but the advantage. To alter our tone to the moderation of a merely practical conviction, and to oblige us to acknowledge the want of speculative and apodictical certainty. But I should think that nothing in the world can be so little united with the design of supporting a good cause, as artifice, dissimulation and fraud. That in the weighing of the grounds of reason of a mere speculation every thing must be honourably conducted, is the least that can be required. Could but this little, however, be surely counted upon, the controversy of speculative reason concerning the important questions of God, of immortality (of the soul), of liberty, either would have been long ago decided, or were soon ended. Thus the purity of the mindedness often stands in the converse relation to the good quality of the thing itself; and this has perhaps more sincere and honourable opponents, than defenders.

I therefore presuppose readers, who would not have a just cause unjustly defended. Relatively to which it is now decided that, according to our principles of the Critic of pure Reason, when that which happens is not considered, but what in justice ought to happen, there must properly speaking be no polemic

of pure reason. — It is very foolish to cry out against certain hazarded assertions, or temerarious attacks on what has already on its side the approbation of the greater and better part of the commonwealth, as dangerous; for that gives them an importance, which they by no means ought to have. — The dogmatic defender of the good cause against such enemies I would not read at all, as I know before hand that he will attack the seeming reasons of the others, only with a view to procure an inlet to his own, besides, an every day-appearance does not afford so much matter for new observations, as a surprising one ingeniously excogitated. Whereas the opponent of religion, likewise dogmatical in his way, affords my Critic the wished-for employment and occasion to more correctness and percision of its principles, without being under the smallest apprehension on his account.

But the youth, who is devoted to academical learning, must at least be warned against such writings, and withholden from the early knowledge of so dangerous positions, till his judgement is ripened, or rather the doctrine, which is intended to be instilled into his tender mind, firmly rooted, in order to resist all persuasion to the contrary, whencesoever it may come. —

Again, the endless contentions of a merely dogmatical reason finally necessitate to seek quiet in some one critic or other of this reason itself; the state of nature (as Hobbes maintains) is a state of injustice and violence, and we must necessarily quit it, in order to sub-
ject

ject ourselves to the legal coercion, which restrains our liberty but to the condition, that it can consist with the liberty of every other person and thereby of the commonwealth.

To this liberty, then, appertains also that of submitting one's thoughts and doubts, which he cannot resolve himself, to the judgment of the public, without being decried as a turbulent and dangerous citizen. This lies in the original right of human reason, which acknowledges no other judge, than the universal reason of man itself, wherein each has his voice; and, as from this must be derived every melioration, of which our state is susceptible, such a right is sacred, and must not be violated.

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it can consist with the liberty of every other
person and thereby of the commonwealth.

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be violated.

THE
CONTENTS
OF THE SECOND VOLUME.

	Page
OBSERVATIONS ON THE FEELING OF THE BEAUTIFUL AND SUBLIME	1
SECTION I.	
Of the different Objects of the Sentiment of the Sublime and Beautiful	5
SECTION II.	
Of the Properties of the Sublime and Beautiful in Man in general	9
SECTION III.	
Of the Distinction of the Beautiful and of the Sublime in the Counterrelation of both Sexes	55
SECTION IV.	
Of national Characters, so far as they rest upon the distinct Feeling of the Beautiful and of the Sublime	63
SOMETHING ON THE INFLUENCE OF THE MOON ON THE TEMPERATURE OF THE AIR	79
HISTORY AND PHYSIOGRAPHY OF THE MOST REMARKABLE CASES OF THE EARTHQUAKE OF 1775	93
ON THE VOLCANOS IN THE MOON	143
OF A GENTLE TON LATELY ASSUMED IN PHILOSOPHY	159
ON THE FAILURE OF ALL THE PHILO- SOPHICAL ESSAYS IN THE THEODI- CEE	189

CONTENTS.

THE ONLY POSSIBLE ARGUMENT FOR THE DEMONSTRATION OF THE EX- ISTENCE OF GOD

Page
217

SECTION I.

Argument for the Demonstration of the Existence
of God

227

SECTION II.

Of the great Advantage peculiar to this Mode of
Proof in particular

252

SECTION III.

Wherein is evinced that besides the adduced Ar-
gument no other in support of a Demonstration
of the Existence of God is possible

355

THE RELIGION WITHIN THE SPHERE OF NAKED REASON

367

Representation of the Christian Religion as a moral
Religion

369

Of the Dwelling of the bad Principle by the good,
or on the radical Bad in human Nature.

372

Of the Conflict of the good Principle with the bad
for the Dominion over Man

381

The Victory of the good Principle over the bad,
and the Foundation of a Kingdom of God upon
Earth

391

Of Worship and of false Worship under the Domi-
nion of the good Principle, or of Religion and
Priestdom

403

Of the Guide of Conscience in Matters of Belief

415

THE END OF ALL THINGS

423

ERRATA.

ERRATA.

VOL. I.

P.	L.
IX	8 & 4 for affection <i>read</i> affect,
XII	23 for affection <i>read</i> affect
142	24 for prejudices <i>read</i> premisses
328 Note	16 for 19 <i>read</i> 10
549	2 for immensurable <i>read</i> indemonstrable,

VOL. II.

10	18 <i>read</i> others' weal. 24 <i>read</i> others' wants,
18 Note	2 <i>read</i> of romantic.
14 Note	6 for more <i>read</i> more
16	16 for compassion <i>read</i> sympathy of sorrow,
23	8 <i>read</i> others'
23	16 after principle <i>read</i> is 17 <i>dele</i> is
40	1 for In like manner <i>read</i> And 2 for for <i>read</i> to 3 for fabric <i>read</i> structure
49	b. 10 for trade <i>read</i> commerce
81 Note	11 for in <i>read</i> upon
111	10 <i>read</i> those springs. 15 f. them r. these cavities,
167	26 for Qnderitur. <i>read</i> Quaerit
169 Note 2	10 <i>read</i> 'collier's unbelief'
176	b 5 after follow <i>read</i> night
199 Note	1 for among <i>read</i> of 3 for none <i>read</i> no difficulty
212 Note	9 for in a manner <i>read</i> as it were
214	10 for it must then be this <i>read</i> but it may per- haps surprise us
615	3 after hundred <i>read</i> German
538	2 for continuance <i>read</i> continuance

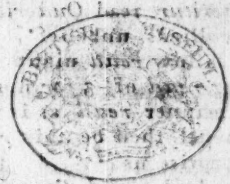
OBSERVATIONS

THE ONLY PUBLISHED JOURNAL
OF THE
STATE OF
NEW YORK
VOL. I.

1. The first of the year, 1800, was a day of great
celebration, and the people of New York were
glad to see the new year begin with a
fresh and cheerful spirit.

2. The second of the year, 1800, was a day of
great sorrow, and the people of New York
were sad to see the new year begin with a
fresh and cheerful spirit.

3. The third of the year, 1800, was a day of
great joy, and the people of New York
were glad to see the new year begin with a
fresh and cheerful spirit.



4. The fourth of the year, 1800, was a day of
great sorrow, and the people of New York
were sad to see the new year begin with a
fresh and cheerful spirit.

5. The fifth of the year, 1800, was a day of
great joy, and the people of New York
were glad to see the new year begin with a
fresh and cheerful spirit.

OBSERVATIONS
ON THE
FEELING
OF THE
BEAUTIFUL AND SUBLIME.

Vol. II.

A

OBSCURE THINGS

FEELING

AMBIENT SUBSTANCE

OBSERVATIONS

ON THE

FEELING

OF THE

BEAUTIFUL AND SUBLIME.

SECTION I.

OF THE DIFFERENT OBJECTS OF THE SENTIMENT OF THE SUBLIME AND BEAUTIFUL.

The various sensations of delight, or of chagrin, depend not so much on the quality of external things which excite them, as on every person's own feeling, thereby to be moved with either pleasure or displeasure. Hence proceed the joys of some men in what others find disgust, the amorous passion that is often an enigma to every body, or the insuperable aversion the one has to what is totally indifferent to the other. The field of the observations of these peculiarities of human nature extends to a great distance, and still conceals a rich store for discoveries, which are no less agreeable than instructive. At present I shall cast my eye but to a few places that seem to distinguish themselves particularly in this district, and even to these, more the eye of an observer, than that of a philosopher.

As a man finds himself happy but so far as he satisfies an inclination; the feeling which makes him capable of enjoying great pleasure without requiring thereto distinguished talents, is certainly not a trifle. Persons in

good plight, whose most witty authors are their cooks, and whose works of elegant taste are in their cellars, are as much over-joyed with ribaldry and a coarse joke, as persons of fine feelings are transported with what they are so proud of. A man fond of his convenience, who loves to have books read to him, because it is thereby so easy to fall asleep; the merchant, to whom all pleasures seem trifling and foolish, except that which a prudent man enjoys when he is casting up the profits of his commerce; he who loves the sex but so far as he considers them as objects of enjoyment; the lover of the chase, whether he catches flies, like Domitian, or hunts wild beasts like A...; all these have a feeling which renders them susceptible of enjoying pleasure in their own way, without needing to covet other pleasures, or even being able to form to themselves a conception of them; but to this at present I pay no attention. There is yet a feeling of a finer sort, which is so named, either because it may be longer enjoyed without satiety and exhausting, or because it presupposes, so to say, an irritability of the soul, which at the same time renders it fit for virtuous emotions, or because it indicates talents and superiority of understanding; whereas that may have place together with a total want of thought. This is the feeling, of which I shall contemplate one side. Yet I exclude from this the inclination that is fixed on profound introspections of intellect; and the stimulation, of which Kepler was susceptible, when he, as Bayle relates, would
not

not have sold one of his discoveries for a principality. This sensation is far too fine to belong to the present outline, that is to treat but the sensible feeling, of which more vulgar souls are capable.

The finer feeling, which we shall now consider, is chiefly of a twofold nature; the sentiment of the SUBLIME and of the BEAUTIFUL. The emotion of both is agreeable: but in a very different manner. The view of a mountain, whose snowy summit towers above the clouds, the description of a roaring tempest, or Milton's representation of the infernal regions, excites complacency, but with dread; whereas the prospect of flowery meadows, vallies with winding rivulets, and covered with grazing cattle, the description of Elysium, or Homer's painting of Venus' girdle, likewise occasion an agreeable feeling, but which is sprightly and smiling. In order that that impression may be made on us sufficiently strong, we must have a *sentiment of the sublime*, and in order to enjoy this properly, a *sentiment of the beautiful*. Lofty oaks and solitary shades in hallowed groves are sublime, beds of flowers, shrubs and young trees are beautiful. Night is sublime, day is beautiful. Minds, disposed to feel the sublime, are, by the soft stillness of a summer evening, when the twinkling light of the stars breaks through the dusky shades of night, and the solitary moon, in mild and serene majesty, stands upon the horizon, insensibly inspired with high sentiments, of friendship, of contempt of the world, of eternity. Splendid day

day infuses busy zeal and a feeling of gayety. The sublime *moves* or touches, the beautiful *charms*. The mien of the person, who finds himself in the full sentiment of the sublime, is serious, sometimes fixed and astonished. On the other hand announces itself the lively sentiment of the beautiful by a sparkling glory in the eye, by lineaments of smiling, and frequently by loud merriment. The sublime is of a different nature. The feeling of it is sometimes accompanied with dread, or even melancholy, in some cases with tranquil admiration merely, and in others with a beauty spread over a sublime plan. The first I shall name the DREADFUL OR TERRIFIC SUBLIME, the second the NOBLE, and the third the MAGNIFICENT. Deep solitude is sublime, but in a terrific manner.* Hence vast deserts, like the

* I shall adduce but an example of the dreadful sublime which the description of a total solitude can inspire, and for this purpose quote a few passages from Carazan's dream in the Bremen Magazine, vol. v. p. 539. This penurious rich man had, in proportion as his wealth increased, locked up his heart against compassion and love towards every other person. But as philanthropy cooled in him, the assiduity of his prayers and the actions of religion augmented: Carazan, after an acknowledgment of that tenour, continues: one evening, casting up my accounts by the light of my lamp, and calculating the profits of trade, I was overpowered by sleep. In this state I saw the angel of death coming upon me like a whirlwind; he smote me, ere I could deprecate the terrible stroke. I was seized with fear; when I perceived that my lot was cast for eternity, and that to all the good I had done nothing could be added, and from all the ill nothing taken away. I was conducted to the throne of him who inhabits the pure empyrean. The Invisible from amidst the streaming glory that shone before me addressed me thus: Carazan, thy worship is rejected. Thou hast locked up thy heart against philanthropy and holden thy treasures with an iron hand.
Thou

the immense Shamo in Tartary, have always given occasion to place in them terrible shadows, goblins damn'd and frightful phantoms. The sublime must be simple, the beautiful may be dressed and ornamented. A great height is equally sublime with a great depth: but this is accompanied with shuddering, that with admiration; hence this feeling may be terribly sublime, and that nobly. The view of an Egyptian pyramid moves, as Hasselquist mentions, much more, than one can represent to himself from any description: but its structure is both simple and noble. St. Peter's Church in Rome is magnificent. As in its plan, which is simple and great, beauty, for instance, gold, mosaic &c. &c., is

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so

Thou hast lived but for thyself, and therefore thou shalt for the future live alone to all eternity, and be excluded from every intercourse with the whole creation. In this very moment I was hurried away by an invisible power, and driven through the stupendous fabric of the universe. I soon left behind me innumerable worlds. As I approached the utmost end of nature, I remarked, that the shades of the unbounded inane sunk into the deep before me. A frightful kingdom of eternal calm, and solitude, and darkness. Unspeakable dread seized me at this prospect. I lost sight by degrees of the last stars, and finally the last glimmering appearance of light was extinguished in the uttermost darkness! The agony of despair increased every moment, as every moment augmented my distance from the last inhabited world. I reflected with insufferable grief, that, when ten thousand times thousand years shall have carried me far beyond the boundaries of all that is created, I must always look forward in an unfathomable abyss of darkness, without help, or hope of any return. — In this amazement I stretched out my hands with such violence after objects of reality, that I immediately awoke. And now I have learned to esteem men; for even the poorest of those, whom in the pride of my fortune I turned away from my gate, would, in that dismal waste, have been far preferred by me to all the treasures of Golconda. — —

so diffused, that the sentiment of the sublime acts the most throughout; the object is denominated magnificent. An arsenal must be simple and noble, a palace magnificent, a villa beautiful and decorated.

A long duration is sublime. Is it of past time? it is noble; if it is foreseen in an immense futurity, it has in it something dreadful. An edifice of the remotest antiquity is venerable. Haller's description of the future eternity instils a soft dread, and of the past, gazing admiration.

SECTION II.
OF THE PROPERTIES OF THE SUBLIME, AND
BEAUTIFUL IN MAN IN GENERAL.

Understanding is sublime, wit is beautiful.

Boldness is at once great and sublime, artifice is little, but beautiful. Circumspection, said Cromwel, is a mayor's virtue. Veracity and probity are both simple and noble. Jest and courteous flattery are fine and beautiful. Agreeableness is the beauty of virtue. Disinterested eagerness to serve is noble; politeness and civility are beautiful. Sublime properties inspire esteem, but beautiful ones love. People, whose feeling inclines chiefly to the beautiful, look for their honest, constant, and serious friends but in need; but for society they chuse the jocose, agreeable, and civil companions. One esteems many too much, to be able to love them. They inspire admiration: but they are too far above us, that we should presume to approach them with the familiarity of love.

Those, who unite in themselves both sentiments, will find, That the emotion of the sublime is more potent, than that of the beautiful; only that it without variety or the accompaniment of the latter wearies, and cannot be long enjoyed.* The exalted feelings,

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to

* The sentiments of the sublime strain the powers of the soul more, and therefore tire sooner. One can read a pastoral poem longer at once, than Milton's *Paradies lost*, and *Bruyere* longer than *Young*. It seems to me a fault even of the latter, as a moral poet, that he continues far too

to which the converse in a well-chosen society sometimes raises itself, must at intervals resolve themselves into sprightly joking, and the laughing friends ought to make the beautiful contrast with the moved serious mien; both which sorts of feeling may be easily varied. Friendship has principally the stroke of the sublime in it, but the love of the sex that of the beautiful. Yet tenderness and profound esteem give to the latter a certain dignity and sublimity; whereas mimic joking and familiarity heighten the coloration of the beautiful in this feeling. Tragedy, in my opinion, distinguishes itself from comedy chiefly in this, that in the former is touched the sentiment of the sublime, in the latter that of the beautiful. In the former show themselves generous sacrifices for other's well, bold resolution in danger, and proved fidelity. Love is there sad, tender and full of esteem; the misfortune of others excites in the breast of the spectator sympathetic feelings, and makes his generous heart beat high for other's wants. He is softly moved, and feels the dignity of his own nature. Whereas comedy represents fine tricks, wonderful embarrassments, and ingenious persons who know how to extricate themselves, fools that suffer themselves to be duped, jesting and ridiculous characters. Love here is not so morose;

too uniformly in the sublime tone: for the force of the impression cannot be renewed but by contrasting with softer passages. In the beautiful nothing tires more than laborious art therein betrayed. The effort to charm is painfully felt.

morose; it is gay and intimate. Yet, as in other cases, so in this, the noble may to a certain degree be united with the beautiful.

Even vices and moral crimes frequently carry with them some strokes of either the sublime or the beautiful; at least so as they appear to our sensible feeling; without being brought to the test of reason. The anger of a formidable man is sublime, like that of Achilles in the Iliad. In general Homer's heroes are terribly sublime, those of Virgil on the other hand nobly so. Public bold revenge of a great injury has in itself something great, and how illicit soever it may be, it touches in the recital with dread and complacency. Hanway relates that Schach-Nadir, being attacked at night in his tent by several conspirators, called out, after he had received several wounds and defended himself desperately, *Have mercy! I will pardon you all.* One of them, holding up his sword, answered, *thou hast shown no mercy, and meritest none.* Resolute audacity in a villain is highly dangerous; but it moves in the recital, and even when he is dragged to an ignominious death, he in some measure ennobles it by meeting it daringly and with contempt. Whereas a cunningly contrived scheme, even when a base trick is the object, has in it something fine, and is laughed at. Amorous inclination (coquetry) in a refined sense, namely, an assiduity to engage and to charm, in a person otherwise agreeable, is perhaps reprehensible, but yet beautiful, and is commonly preferred to the modest serious decency.

The

The figure of persons, who please by their outward appearance, falls sometimes into the one, sometimes into the other species of feeling. A great stature acquires consideration and reverence, a small one more familiarity. Even the tawny colour and black eyes are nearer related to the sublime, blue eyes and a fair colour to the beautiful. A somewhat old age unites itself more with the properties of the sublime, but youth with those of the beautiful. In the same manner is the distinction of ranks circumstanced, and in all these references just mentioned must even the dresses accord with this difference of feeling. Persons of great distinction must observe simplicity, at most magnificence, in their apparel; little folks may be set out and adorned. Dark colours and uniformity in attire become age; youth is set off and glitters in a brighter and more lively dress. Among the classes of men, when fortune and rank are equal, the ecclesiastic must show the greatest simplicity, the statesman more splendour and magnificence. The *cicisbéo* may dress himself out as he pleases.

In the outward circumstances of fortune too there is something which, at least according to the fancy of men, belongs to these feelings. Birth and title find men commonly inclined to reverence. Opulence, even without merit, is honoured by the disinterested themselves; perhaps because projects of great actions, which might thereby be carried into execution, unite themselves with its representation. This reverence is occasionally born
many

many a wealthy wretch, who never will perform such actions, and has no conception of the noble feeling, which only can render riches valuable. What augments the evil of poverty is the slighting that never can be totally outweighed, at least in vulgar eyes, by merit itself, unless rank and title illude this coarse feeling and in some measure deceive to its advantage.

In human nature are never to be found commendable properties, without varieties of them running at the same time by infinite shadings into the utmost imperfection. The property of the *terrific sublime*, when it becomes totally unnatural, is portentous or *strange*. * Unnatural things, so far as the sublime is meant in them, though it is little or not at all to be met with, are *impertinencies*. Who loves and believes the strange, is a *phantast*; the inclination to impertinencies makes the *humorist*. On the other side the feeling of the beautiful degenerates, when the noble is totally wanting, and is named *trifling*. A man possessing this property, when he is young, is denominated a *fop*; is he of a middle age? he is a *gawk*. As to more advanced years the sublime is the most necessary; an *old gawk* is the most contemptible creature in nature, as a young humorist is the most nauseous and intolerable. Jest and sprightliness pertain to the feeling of the beautiful

* So far as sublimity or beauty overleaps the known medium, it is usually distinguished by the appellation of *romantic*.

beautiful. A considerable degree of understanding, however, may shine through them, and so far they may be more or less related to the sublime. He, in whose sprightliness this intermixture is insensible, *toys*. Who constantly toys is *silly*. It is obvious, that even wise people sometimes toy, and that no small power of mind is necessary to call the understanding from its post for a while, without any thing's being thereby overlooked. He, whose conversation or actions neither afford pleasure nor touch, is *tedious*. The tedious, so far as he attempts to give pleasure and to move, is *insipid*. The insipid, when he is puffed up, is a *fool* or a *coxcomb*. *

I shall render somewhat more intelligible this wonderful sketch of human weaknesses by examples; for he, who does not possess Hogarth's burine, must supply by description what is wanting to the delineation in expression. Boldly taking upon ourselves the dangers, as our own, of our native country, or of the rights of our friends, is sublime. The crusades, the antient chivalry, were strange or portentous; duels, a miserable relic of the latter from a perverted conception of the call of

* One soon notices, that this respectable society divides itself into two lodges, into that of the humorists and that of the gawks. A learned humorist is civilly named a *pedant*. When he assumes the insolent mien of wisdom, like the dunces of ancient and modern times, the cap with bells fits him well. The class of gawks is more to be met with in the great world. It is perhaps still better than the former. There is a great deal to be gained from it and much to be laughed at. In this caricature the one makes the other a wry mouth and runs his addle pate against his brother's.

of honour, are impertinencies. Melancholy withdrawing from the noise and bustle of the world from a rightful disgust is noble. The solitary or recluse devotion of the ancient hermits was strange. Cloisters and such graves, for the purpose of burying living saints, are impertinencies. The subduing of one's passions by principles is sublime. Abstinencies, mortifications, penances or castigations, vows and other such monkish virtues are impertinencies. Sacred bones, sacred wood and all such trumpery, the holy stool of the Grand Lama of Thibet not excepted, are impertinencies. Of the works of genius and of fine feeling, the epic poems of Virgil and of Klopstock appertain to the noble, those of Homer and of Milton, to the portentous. Ovid's metamorphoses are impertinencies, the fairy tales of french levity are the most sorry impertinencies that ever were hatched. The anacreontic poems commonly approach very near towards the trifling.

The works of understanding and of subtilty, so far as their subjects contain something for the feeling, take some part likewise in the aforementioned varieties. The mathematical representation of the immense size of the fabric of the world, the metaphysical contemplations of eternity, of Providence, of the immortality of the soul, contain a certain dignity and sublimity. Whereas philosophy is deformed by many empty subtilties, and the appearance of profundity does not hinder the four syllogistic figures from meriting to be numbered to the school-impertinencies.

In

In moral properties true virtue only is sublime. There are however good moral qualities, which are amiable and beautiful, and may, so far as they harmonize with virtue, be considered as noble, though they cannot, properly speaking, be numbered to the virtuous mindedness. On this the judgment is fine and implicated. One certainly cannot name virtuous that constitution of mind which is a source of such actions, to which indeed virtue too would lead, but from a ground that agrees therewith contingently only, but according to its nature may also frequently collide with the universal rules of virtue. A certain tender-heartedness, which is easily brought to a warm feeling of *compassion*, is beautiful and lovely; for it shows a kind participation in the fate of other men, which principles of virtue likewise injoin. But this passion, though of a good quality, is weak and always blind. For let us suppose, that this feeling prompts you to assist an indigent person with money, but you are indebted to another, and thereby put it out of your power to discharge the strict duty of justice: thus it is manifest the action cannot spring from a virtuous intention; for such a one could not possibly prompt you to sacrifice a higher obligation to this blind fascination. When, on the other hand, universal benevolence towards the human species is become your principle, to which you always subordinate your actions, the love towards the indigent remains still; but it is now placed from a higher station in the true relation towards

towards your whole duty. Universal benevolence is a ground of participation in his distress, but at the same time of justice too, according to whose precept you must at present forbear this action. The moment that this feeling has mounted to its proper universality, it is sublime, but also colder. For it is not possible, that our bosom should swell with tenderness for every man, and be overwhelmed with sorrow for the necessities of all others, else the virtuous, incessantly melting into tears of compassion like Heraclitus, would, notwithstanding all this sincerity, be nothing but a tender-hearted idler.* The second species of the benign feeling, which is indeed beautiful and amiable, but yet not the groundwork of a true virtue, is *complaisance*. An inclination to become agreeable to others by friendliness, by yielding to their desires, and by a conformity of our conduct to their sentiments. This ground of a charming complaisance is beautiful, and the flexibility of such a heart, of a good quality. But it is so little a virtue, that, where higher

* On a nearer consideration one finds, that, however amiable the compassionate property may be, it has not in itself the dignity of virtue. A suffering child, an unfortunate and pleasant woman, fills our heart with this grief, while we at the same time hear with indifference the account of a battle, in which it may be presumed that a considerable part of the human species must undeservedly sink under the most cruel evils. Many a prince, who turns away through sadness from a single unfortunate person, gives at the same time orders for war from a motive frequently but vain. There is here no proportion at all in the effect, how then can it be said, that universal philanthropy is the cause?

higher principles do not confine and weaken it, every vice may spring out of it. For not to mention, that this complaisance towards those, with whom we associate, is very frequently an injustice towards others, who are not within this small circle, such a man, when this is the only impulse, may have all the vices; not from immediate inclination, but because he willingly lives to please. He out of amiable complaisance becomes a liar, an idler, a drunkard &c. &c., for he does not act according to the rules of good conduct, but according to an inclination which is beautiful in itself, but, being without stability and principles, trifling.

Consequently true virtue can be grafted but upon principles, and the more general they are, the nobler and more sublime does it become. These principles are not speculative rules, but the consciousness of a feeling, which dwells in every human breast, and extends itself much farther than to the particular grounds of compassion and of complaisance. I believe to comprehend every thing, when I say, it is the *feeling of the beauty and of the dignity of human nature*. The former is a ground of universal benevolence, the latter of universal reverence, and if this feeling had the greatest perfection in any one human heart, this man would love and esteem himself, it is true, but only so far as he is one of all those, to whom extends itself his enlarged and noble feeling. Only by subordinating our particular inclination to a so extensive one, can our benign instincts
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be proportionally applied, and effectuate the noble decency which is the beauty of virtue.

With regard to the weaknesses of human nature and the little potency, which the universal moral feeling would exercise over the most hearts, Providence has laid in us such auxiliary instincts as supplements of virtue, which, by exciting some, even without principles, to beautiful actions, may at the same time give others, who are governed by principles, a stronger impulse thereto. Compassion and complaisance are grounds of beautiful actions, which perhaps would be altogether stifled by the preponderance of a coarser self-interest, but not immediate grounds of virtue, as we have already seen, though, since they are ennobled by the relation to it, they acquire its name too. I may therefore term them adopted virtues, but that which rests upon principles, genuine virtue. Those are beautiful and charming, this only is sublime and respectable. The mind, in which predominate the former feelings, is named a good heart and the men of that sort good-hearted; whereas a noble heart is justly attributed to the virtuous from principles, but he himself is denominated an honest man. These adopted virtues, however, as they comprise the feeling of an immediate pleasure in kind and benevolent actions, have a great similarity to the true virtues. The good-hearted associates with you peaceably and courteously out of immediate complaisance without any further design, and feels a sincere sorrow for the sufferings of another.

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But,

But, as this moral sympathy is not sufficient to stimulate the sluggish human nature to actions of public use, Providence has placed in us a certain feeling, which is fine, and can set us in motion, or even keep in balance the coarse self-interest and the vulgar sensuality. This is the feeling or sense of honour, and its consequence shame. The opinion, which others may have of our worth, and their judgment of our actions are motives of great weight that draw from us many sacrifices; and what a great part of mankind would not have done, either from a good-hearted emotion immediately arising, or from principles, is often enough performed, merely for the sake of outward appearance, from a fancy; which is highly useful, though in itself very superficial: as if the judgment of others determined the value of us and of our actions. What is done from this incentive is not in the smallest degree virtuous, for which reason every one, who would be held such, cautiously conceals the motive of ambition. This inclination, as it cannot be immediately excited by the beauty of the actions, but by their becomingness in the eyes of others, is not so nearly connected with genuine virtue as goodheartedness. I may therefore, as the sense of honour is delicate, denominate it, that which is similar to virtue, and what is thereby occasioned, the glitter of virtue.

If we compare the temperaments of men, so far as one of these three species of feeling predominates in them and determines the moral character; we shall find, that every one
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of them stands in a near relation to one of the temperaments according to the usual division, yet so, that a greater want of moral feeling would fall to the share of the phlegmatical. Not as if the chief criterion in the character of these different dispositions of mind concerned the aforesaid strokes; for the coarser feeling, for instance, self-interest, common voluptuousness &c., we by no means consider in this treatise, and yet upon such inclinations, in the usual division, attention is chiefly bestowed; but because the abovementioned finer moral feelings may be easier united with either the one or the other of these temperaments and for the most part are actually therewith united.

An intimate feeling for the beauty and dignity of human nature, and a disposition and strength of mind to refer one's actions thereto, as to an universal ground, is serious, and does not associate itself well with a flirting mirth, nor with the fickleness of a light-headed person. It approaches even to melancholy, a soft and noble feeling, so far as it is founded upon that dread, which a limited soul feels, when it, full of a great design, sees the dangers it has to support, and has in view the difficult but great victory of the self-overcoming. Genuine virtue, then, from principles, has something in itself, which seems to have the most consension with the *melancholy* constitution of mind in the tempered sense.

Goodheartedness, a beauty and fine irritability of the heart, according to the occasion

which may occur, to be touched in single cases with compassion, or with benevolence, is much subjected to the vicissitude of circumstances; and as the movement of the soul does not rest upon a universal principle; it (the soul) easily assumes various forms, accordingly as the objects present the one or the other side. And as this inclination has the beautiful for its object, it seems to unite itself the most naturally with that temperament commonly named *sanguine*, which is inconstant and addicted to pleasure. In this temperament we have to seek the beloved properties distinguished by the appellation of adopted virtues.

The feeling for honour has commonly been adopted as a criterion of the *choleric* complexion, and we may thereby embrace the occasion to investigate the moral consequences of this fine feeling, which for the most part aim at glittering, for the description of such a character.

Never is a man without all traces of fine feeling; but a greater want of it, which is comparatively termed insensibility, enters into the character of the *phlegmatic*, who is usually bereaved of even the coarser springs, as the appetite for money &c. &c., but which we may leave him together with other sister-inclinations, as they belong not at all to this plan.

Let us now contemplate more closely under the adopted division of temperaments the feelings of the sublime and beautiful, principally so far as they are moral.

He,

He, whose feeling inclines to the *melancholy*, is not so named because he, deprived of the joys of life, grieves in dark moping melancholy, but because his feelings, if they were encreased beyond a certain degree, or by any cause received a false bent, would easier tend to melancholy than to another state. He has chiefly a *feeling for the sublime*. Even the beauty, for which he has a feeling likewise, must not only charm, but, by inspiring him at the same time with admiration, move him. The enjoyment of pleasure is with him more serious: but not on that account smaller. All emotions of the sublime have something in them more enchanting, than the juggling charms of the beautiful. His being-well is rather contentment than mirth. He is steadfast. He therefore ranges his feelings under principles. They are the less subjected to inconstancy and to alteration, the more universal this principle is, to which they are subordinated, and the more enlarged the high feeling is which comprehends the lower under it. All particular grounds of inclination, if they are not deduced from such an high ground, are subjected to many exceptions and alterations. The vivacious and friendly Aleest says: I love and esteem my wife, for she is beautiful, caressing and prudent. But who, when she is deformed by disease, and grown peevish through age, after the first illusion is vanished, would not appear more prudent to him, than any other. When the object no longer exists, what can become of the inclination? Take, on the

other hand, the benevolent and sedate Adrast, who says to himself: I will treat this person kindly and with reverence, for she is my wife. This sentiment is noble and magnanimous. Let the casual charms alter, she is still his wife. The noble ground remains and is not so much subjected to the inconstancy of external things. Of such a quality are principles in comparison of emotions, which boil up by single occasions merely, and so is the man of principles compared with him, who is occasionally seized with a good-hearted and kind movement. But how, when even the secret language of his heart is: I must assist that man, for he suffers; not as if he were my friend or companion, or that I hold him capable, one day to acknowledge a benefaction with gratitude. There is at present no time for too nice reasoning, and no delay to be made in starting questions. He is a man, and what befalls men, concerns me likewise. Then his procedure rests upon the highest ground of benevolence in human nature, and is extremely sublime, as well as to its immutability, as on account of the universality of its application.

To proceed with my observations. The man of a melancholy temper of mind gives himself little trouble about what others judge of, what they hold good or true, he relies on his own insight merely. As the motives with him assume the nature of principles; it is not easy to bring him to other thoughts; his steadfastness sometimes degenerates into stubbornness. He beholds the change of modes
with

with indifference and their glitter with contempt. Friendship is sublime, and therefore for his feeling. He may perhaps lose a changeable friend; but the latter does not lose him so soon. The very memory of extinguished friendship is still venerable to him. Affability is beautiful, thoughtful taciturnity sublime. He is a good keeper of his own and of other's secrets. Veracity is sublime, and he hates lying or dissimulation. He has a high feeling for the dignity of human nature. He esteems himself and holds a man a creature that merits reverence. He suffers no abject submission, and breathes liberty in a noble breast. All chains, from the golden, which are worn at court, to the heavy iron ones of galley-slaves, are to him abominable. He is a severe judge as well of himself as of others, and not seldom tired of himself and of the world.

In the degeneration of this character seriousness inclines to melancholy; devotion to fanaticism, the zeal for liberty to enthusiasm. Insult and injustice kindle in him revenge. He is then much to be feared. He braves danger, and despises death. By the perversity of his feeling and the want of a serene reason he falls into the portentous. Inspirations, visions, fits. Is the intellect still weaker? he falls into impertinencies. Prophesying dreams, presensions, and prodigies. He is in danger of becoming either a phantast or a humorist.

He of a *sanguine* constitution has a predominant *feeling for the beautiful*. Hence his joys are laughing and sprightly. If he is not gay, he is displeased and little knows con-

tented tranquillity. Variety is beautiful, and he loves changing. He seeks joy in himself and about him, amuses others and is a good companion. He has much moral sympathy. He delights in the gaiety of others, and their grief makes him tender-hearted. His moral feeling is beautiful, but without principles, and always depends immediately on the present impression, which the objects make on him. He is a friend of all men, or, what is the same, more properly never a friend, though he is indeed good-hearted and benevolent. He dissembles not. To day he entertains you with his friendliness and good humour, to morrow, if you are sick or labouring under the weight of misfortunes, feels true and undissembled compassion, but slips away softly, till the circumstances alter. He never must be a judge. The laws with him are commonly too strict, and he allows himself to be gained by tears. He is a bad saint, never very good and never very bad. He often debauches, and is vitious, more out of complaisance than inclination. He is liberal and beneficent, but a bad payer of what he owes, because he has a great deal of feeling for bounty, but little for justice. Nobody has so good an opinion of his own heart, as he. Though you do not esteem him; you must love him. In the greatest decadency of his character he falls into the trifling, is toying and childish. Unless age lessens the vivacity, or yields more understanding, he is in danger of growing an old gawk.

He,

He, who is distinguished by the *choleric* quality of mind, has a ruling feeling for that species of the sublime, which may be named the *magnificent*. It is properly but the glitter of sublimity, and a glaring colour which hides the intrinsic value of the thing or of the person that is perhaps but common, and deceives and touches by the appearance. As a building with stucco, which represents hewn stone, makes just as noble an impression, as if it really consisted of the latter, and stuck-on cornices and pilasters, which convey the idea of firmness, though they have little stability and support nothing: thus shine tombac-virtues, tinsel wisdom and varnished merit.

The choleric considers his own value and that of his things and actions, from their becomingness or their appearance. With regard to the intrinsic quality and the motive, which the object itself comprises, he is cold and indifferent, neither warmed by true benevolence, nor moved by reverence.* His behaviour is artificial. He must know to take all sorts of stations, in order to judge his decorum from the different postures of the spectators; for he inquires little about what he is, but only what he appears. For which reason he must well know the effect on the universal taste and the various impressions, which his demeanour will have on others. As he in this sly attention absolutely requires
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* He even holds himself but so far happy, as he supposes that he is held so by others.

cool blood, and must not let himself be blinded by love, pity, and sympathy of heart; he will avoid many follies and vexations, into which falls one of a sanguine temperament, who is fascinated by his immediate feeling. On that account he commonly seems more intelligent, than he really is. His benevolence is courteousness, his reverence ceremony, his love excogitated flattery. He is always full of himself, when he assumes the character of a lover or of a friend, and never is either the one or the other. He endeavours to glitter by modes; but, as every thing in him is artificial and made, he is therein stiff and unwieldy. He acts far more according to principles, than the sanguine person, who is actuated merely by occasional impressions; these are not, however, principles of virtue, but of honour, and he has no feeling for either the beauty or the worth of actions, but for the judgment which the public may pronounce on them. As his procedure, so far as the source from which it springs is not considered, is almost of as common a benefit as virtue itself; he acquires in vulgar eyes the same estimation as the virtuous; but he carefully hides himself from finer eyes, because he well knows, that the discovery of the secret springs of ambition would destroy the reverence for him. He is therefore much addicted to dissimulation, in religion hypocritical, in society a flatterer, in state-parties changeable according to circumstances. He is willingly a slave to the great, in order thereby to become a tyrant over the little. *Naïveté*, this noble or beautiful

beautiful simplicity, which bears on it the stamp of nature and not of art, is totally foreign to him. Hence, when his taste degenerates, his glitter is brawling, that is, in a disgustful manner boasting. He then falls, as well as to his style as to dress, into the gallimatia (the exaggerated) a species of impertinencies, which relatively to the magnificent is that, which is the strange or the chimerical with regard to the serious sublime. In offences he then falls upon duels or processes, and in the civil relations upon ancestors, precedence and title. So long as he is but vain, that is, seeks honour, and exerts himself to catch the eye, he may be easily supported; but when, notwithstanding the total want of real preferences and talents, he is blown up, he is, what he would the least willingly be held, a fool.

As into the *phlegmatic* mixture no ingredients of either the sublime or beautiful usually enter in a very remarkable degree; this property of the mind belongs not to the connexion of our discussions.

Of whatever nature these finer feelings, hitherto handled, may be, whether they be sublime or beautiful, they have the common fate, that they, in the judgment of those, whose feeling is not attuned to them, always seem at once perverted and absurd. A man of a tranquil and selfish diligence has, so to speak, by no means the organs, to feel the noble touch either in a poem or in a heroic virtue, he reads rather a Crusoe than a Grandison, and holds Cato an obstinate fool. In the same

same manner to persons of a somewhat serious disposition of mind that which is charming to others appears trifling, and the buffoon-naïveté of a shepherd's action is to them insipid and childish. And even, when the mind is not totally destitute of an accordant fine feeling, the degrees of its irritability are very different, and it is obvious, that the one finds something noble and becoming, which appears to the other great, indeed, but portentous. The opportunities, which offer themselves in immoral things to discover something of the feeling of another, may give occasion to conclude with tolerable probability on his feelings, relatively to the higher properties of the mind and even of those of the heart. Who tires during the performance of a beautiful piece of music, affords a presumption, that the beauties of style and the fine enchantments of love will have little power over him.

There is a certain turn for trifles [*esprit des bagatelles*], which indicates a sort of fine feeling, but which directly tends to the contrary of the sublime. A taste for something, because it is very artificial and laboured, palindromes or verses which may be read backwards and forwards, riddles, watches in rings, chains for fleas &c. &c. a taste for every thing measured with the compass and in a painful manner orderly, though without use, for instance, books which stand in long rows in bookcases finely ornamented, and an empty pate to behold and be delighted with them; rooms decorated like optical boxes and washed clean
to

to excess, together with an inhospitable and surly landlord who inhabits them. A taste for all that is rare, how little intrinsic value soever it may have. Epictetus' lamp, a glove of Charles XII; the rage for coins falls in with this in a certain manner. Such persons are liable to great suspicion, to be in the sciences fancymongers and humorists, but in morals without feeling for all that is in a free manner either beautiful or noble.

Persons wrong one another, when the one dispatches the other, who does not perspect the value, or the beauty of what moves, or charms him, by saying, he does not understand it. The question here is not so much, what the understanding perspects, as what is felt. Yet the capacities of the soul have so great a connexion, that for the most part one may infer from the phenomenon of feeling to the talents of introspection. For these talents would be in vain bestowed on him who has many preferences of intellect, if he had not at the same time a strong feeling for the true noble or the beautiful; which must be the spring to apply well and regularly those gifts of the mind. *

It

* It is likewise obvious, that a certain fineness of feeling is accounted as a merit to a person. That one can make a hearty meal on roast beef and plumpudding, or that he sleeps incomparably well, is considered as a sign of a good stomach and digestion, but never construed as a merit in him. Whereas, whoever sacrifices a part of his meal to a concert, or by a description can be merged in an agreeable absence of mind, or willingly reads witty productions, were they but poetical trifles, has almost in the eyes of every body the consideration of a man of fine feelings, of whom one has a more favourable and for him more honourable opinion.

It is customary to name useful that only, which can satisfy our coarser sensation, by supplying abundance of eating and drinking, the expence of clothing, and the luxury and sumptuousness of entertainments and feastings, though I do not see, why all that is wished for by our most exquisite feelings should not alike be numbered to the useful things. But, every thing taken on this footing, he whom self-interest rules is a man, with whom one never must reason on the finer and more elegant taste. A dunghil-fowl is indeed better in such a consideration than a parrot, an earthen pot more useful than a china basin, all the wits in the universe are not equal to a peasant, and the endeavour to discover the distance of the fixed stars, may be delayed, till it is agreed upon, how plowing may be performed in the most advantageous manner. But what madness is it, to engage in such a contest, where it is impossible to lead one another to accordant feelings, because feeling is by no means accordant. One of the coarsest and most common feeling, however, may perceive, that the charms and sweets of life, which seem to be the least necessary, engross our greatest care and that, should we exclude those, we would have few springs left to so many various endeavours. Yet nobody is so rude as not to feel, that a moral action, at least in another, touches the more, the farther it is from self-interest, and the more those noble impulses are conspicuous in it.

When I notice the noble and the weak side of men, reciprocally, I upbraid myself, that I
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am not able to take that station, from which these contrasts represent in a touching form the great picture of the whole human nature. For I willingly concede, that, so far as it belongs to the great plan of nature, these grotesque positions can yield nothing but a noble expression; though one is far too shortsighted to overlook them in this relation. In order however to cast a feeble look on this, I believe I may make the following observations. Those among mankind, who proceed according to *principles*, are but very *few*, which is no doubt good, as it can so easily happen to err in these principles, and then the disadvantage which arises therefrom extends itself the farther, the more general the principle and the more steadfast the person is, who has laid them down for himself. Those, who act from goodhearted instincts, are far more numerous; which, though it cannot be considered singly as any great merit of the person, is highly excellent; for these virtuous instincts fail sometimes, but one with another they answer the great design of nature as well as the others that actuate the animal world so regularly. Those who have in view their most dearly beloved self, as the sole point of reference of their exertions, and who endeavour to turn every thing round self-interest, as the great axle, are the most numerous; than which nothing can be more advantageous, for these are the most diligent, orderly, and circumspect; they give to the whole firmness and stability, by being of public use even without their intention, they furnish the

Vol. II. C necessities

necessaries of life and lay the groundwork, upon which finer souls can superstruct beauty and good sense. In short, ambition is diffused in the hearts of all men, though in an unequal measure, which must give to the whole a beauty charming to admiration. For though ambition, so far as it is a rule, to which the other inclinations are subordinated, is an insane fancy; it is highly excellent as an accompanying instinct. For as every one acts on the vast theatre conformably to his ruling inclinations; he is at the same time prompted by a secret impulsion, to take a station in thought without himself, in order to judge the propriety of his conduct, how it appears and what impression it makes on the spectator. Thereby unite themselves the different groups in a picture of a magnificent expression, where amidst great variety unity is eminent, and the whole of moral nature shows in itself beauty and dignity.

SECTION III.

OF THE DIFFERENCE OF THE SUBLIME AND OF THE BEAUTIFUL IN THE COUNTERRELATION OF BOTH SEXES.

He, who first comprehended the women under the name of the *fair sex*, wished perhaps to say something flattering: but he has hit it better, than he himself may have imagined. For, without taking into consideration, that their form is in general finer, their features softer and more delicate, their mien in the expression of friendliness, of joking, of kindness and humanity more significant and engaging, than that of the male sex, not forgetting, however, that which must be deducted for the secret magic power, whereby they render our passion favourable to the most advantageous judgment of them, there lie chiefly in the character of mind of this sex peculiar strokes, which clearly distinguish it from ours, and which principally tend to make it known by the criterion, *fair*. We, on the other hand, lay claim to the denomination of the *noble sex*, were it not required of a noble disposition of mind, to decline names of honour and rather to bestow than to receive them. By this is not to be understood, that women want noble properties, or that the male sex must totally dispense with the beauties:

ties: it is rather expected, that each sex shall unite both, yet so, that all other excellencies of a woman shall unite themselves but in order to elevate the character of the *beautiful*, which is the proper point of reference; whereas among the male properties the *sublime*, as the criterion of his sex, must be the most eximious. To this must refer all judgments of these two sexes, as well the commendable, as the blameable. This must all education and instruction, and all endeavours to forward the moral perfection of both, have in view; unless the charming distinction, which nature intended to make between two human sexes, shall be rendered indiscernible. For it is here not enough to represent men to one's self, it must at the same time be noticed that these men are not of the same nature.

Women have an innate strong feeling for all that is beautiful, ornamented and embellished. Already in youth they are willingly dressed and take a pleasure in being set off. They are cleanly and very delicate with regard to every thing that occasions disgust. They love jesting, and can be entertained with trifles, if they are but sprightly and agreeable. They acquire very early a modest behaviour, know to assume a polite carriage or manner, and possess themselves; and this at an age, when our wellbred male youth is yet untoward, awkward and embarrassed. They have many sympathetic feelings, much goodheartedness and compassion, prefer the beautiful to the useful, and willingly turn the superfluity of maintenance into parsimony, in order to support

support the expence of glitter and dress. They are very sensible of the smallest offence, and in general acute in observing the smallest want of attention and reverence for them. In fine, they contain the chief ground of the contrast of the beautiful properties with the noble in human nature, and even refine the male sex.

I hope I may be excused from the enumeration of the male properties, so far as they run parallel with those, as it may suffice to contemplate both in the comparison. The female sex have understanding, as well as the male, yet is it but a *fine understanding*; our understanding must be a *profound* one, which is an expression of the same signification with a sublime.

To the beauty of all actions it belongs, chiefly, that they show an easiness in themselves and seem to be accomplished without a painful exertion; whereas efforts and surmounted difficulties excite admiration and belong to the sublime. Deep reflection and a long continued contemplation are noble, but difficult, and are not suitable to a person, in whom ought to appear charms without constraint and a beautiful nature. Laborious study, or painful investigation, though a woman should succeed in it, destroys the excellencies peculiar to her sex, and may because of the singularity render her an object of cold admiration; but it at the same time weakens the charms, by which she exercises her great power over the other sex. Woman, who have their heads stuffed with Greek, like Mrs. Dacier, or carry on profound disputes

about mechanics, like the marchioness of Chastelet, might have a beard to boot; for this would perhaps express more remarkably the air of penetration, to which they aspire. The fine understanding chuses for its objects all that is nearly connected with the fine feeling, and leaves abstract speculations and knowledge, which are useful but dry, to the diligent, solid and profound understanding. Ladies consequently do not study geometry; they know but as much of the position of sufficient reason, or of monades, as is necessary, in order to perceive the salt in the satires of the shallow fancymongers of our sex. The fair may let Cartesius' vortices continue to revolve, without giving themselves any trouble on that account, even should the agreeable Fontenelle bear them company among the planets, and the attraction of their charms loses nothing of its power, though they should know nothing of all that Algarotti endeavoured to point out, for their use, of the powers of attraction of coarse matter according to Newton. They should fill their heads neither with battles from history, nor with forts from geography; for it becomes them as little to smell of gunpowder, as men of musk.

It seems to be a wicked artifice of men to have wished to mislead the fair sex to this perverted taste. For, well aware of their weakness with regard to its natural charm, and that a single waggish look throws them into more confusion, than the most difficult question of the schools, they find themselves, as soon as the sex gives into this taste, decidedly

cidedly superior, and in the advantage, which they otherwise would scarcely have, assist the weaknesses of its vanity with a generous indulgence. The subject of the great science of women is rather a husband, and of men, man. The philosophy of women is not to reason, but to feel. In the opportunity that is afforded them to cultivate their beautiful nature, this relation must always be had in view. One must endeavour to enlarge their whole moral feeling, but not their memory, and that not by universal rules, but by some judgments on the conduct which they see around them. The examples that are borrowed from other times in order to perspect the influence that the fair sex have had in the affairs of the world, the various relations, in which they stood towards the male sex in other ages, as well as in foreign countries; the character of both, so far as it may be hereby illustrated, and the variable taste of pleasures, constitute their whole history and geography. It is proper, that the view of a map, which represents either the whole globe, or the chief parts of the world, should be rendered agreeable to women. This may be done by presenting it but for the purpose of describing the various characters of nations that inhabit them, the differences of their taste and moral feeling, especially with regard to the effect which these have on the relations of the sexes; with a few easy dilucidations from the difference of climates, of their liberty or slavery. It is of little moment, whether or not they know the particular divisions of these countries, their commerce,

potency and rulers. In like manner it will not be useful for them to know more of the fabric of the world, than is necessary to render moving to them the aspect of the heavens in a beautiful evening, if they have in some measure comprehended, that there are to be met with still more worlds and in them other beautiful creatures. Feeling for expressive descriptions, and for music, not so far as it shews art, but sentiment, all this forms and refines the taste of this sex, and has always some connexion with moral emotions. Never a cold and speculative instruction, always sentiments or feelings, which remain as near as possible to their relation of sex. This instruction is so rare, because it requires talents, experience and a feeling heart, and women may do without every other, as even without these they commonly cultivate or improve themselves very well.

The virtue of the female sex is a *beautiful virtue*. * That of the male must be a *noble one*. Those avoid the bad, not because it is wrong, but because it is ugly, and virtuous actions signify, with them, such as are morally beautiful. Nothing of *ought*, nothing of *must*, nothing of *due*. All orders and all surly compulsion are to women insupportable. They do something but because they are pleased so to do, and the art consists but in making that which

* This is above (page 22), in a strict judgment, named adopted virtue; here, as on account of the character of the sex it merits a favourable justification, it is in general denominated a beautiful virtue.

which is good pleasing to them. I hardly believe that the fair sex are capable of principles, and in this I hope I do not offend, for these are very rare with men. Instead of which, however, Providence hath implanted in their breasts humane and benevolent sentiments, a fine feeling for becomingness, and a complaisant soul. Let not sacrifices and magnanimous self-compulsion be required. A man must never tell his wife, when he risks a part of his fortune on account of a friend. Why should he fetter her sprightly affability by burdening her mind with a weighty secret, the keeping of which is incumbent on him only? Even many of their weaknesses are, so to speak, *beautiful faults*. Injury or misfortune moves their delicate souls to sorrow. A man must never shed but generous tears. Those which he sheds in pain or for circumstances of fortune render him contemptible. The *vanity*, with which the fair sex is so often upbraided, if it be a fault in them, it is but a beautiful one. For not to mention, that men, who so willingly flatter the fair, would be in a sad case, were these not inclined to take it well; they really animate thereby their charms. This inclination is an incitement, to show agreeableness and good grace, to give play to their sprightly wit, as also to glitter by the variable sensations occasioned by dress, and to heighten their beauty. In this now there is nothing so offensive to others, but rather, when it is done with good taste, something so comely and elegant, that it is very unmanly to inveigh severely against it. A

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woman,

woman, who flirts and dazzles too much with this, is named a *fool*; which term, however, has no such harsh meaning, as when applied to a man, insomuch that, when persons understand one another, it may sometimes denote even a familiar flattery. If vanity is a fault which in a woman well merits excuse; to be puffed up with pride is not only blameable in them, as in men in general, but totally disfigures the character of their sex. For this property is stupid, ugly, and totally opposite to the engaging, insinuating, modest charm. Then such a person is in a slippery situation. She must be content to be judged severely and without the smallest indulgence; for whoever boasts of meriting esteem, invites all around her to censure. Each discovery of even the smallest fault affords a real joy to every body, and the word fool here loses its softened signification. Vanity and haughtiness must always be distinguished. The former seeks applause and in some measure honours those, on whose account it gives itself this trouble; the latter believes itself already in its full possession, and as it does not endeavour to acquire it, it gains none. A few ingredients of vanity by no means disfigure a woman in the eyes of the male sex; yet they serve, the more evident they are, the more to disunite the fair sex among one another. They then judge one another very sharply, because the one seems to eclipse the charms of the other, and those who have great pretension to conquest, are seldom friends in the true sense.

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To the beautiful there is nothing so opposite as the disgusting, and nothing sinks more beneath the sublime than the ridiculous. Hence no abuse can be more cutting to a man, than to name him a fool, and to a woman, than that she is disgusting. The spectator takes it, that no reproach can be more mortifying to a man, than to be held a liar, and to a woman none bitterer, than that she is unchaste. I shall let this, so far as it is judged according to strict morality, remain valid. But here the question is not, what in itself merits the greatest blame, but what is actually the most severely felt. And I put the question to the reader, whether, when he has reflected on this case, he does not coincide with my opinion. Miss Ninon Lenclos laid not the smallest claim to the honour of chastity; and yet she would have been irreconcilably offended, had one of her lovers transgressed so much in his judgment: and we all know the cruel fate of Monaldeschi, on account of an insulting expression of this nature, from a princess, who did not even wish to represent a Lucretia. It is insupportable, that one should not even be able to do bad, though he had a mind to it, as the forbearance from it is never but a very ambiguous virtue.

In order to avoid this disgustfulness as much as possible, *cleanliness* is necessary, which indeed becomes every person, but in the fair sex is among the virtues of the first rank, and by them cannot easily be carried too far, men, however, sometimes carry it to excess and it is then named trifling.

Modesty

Modesty is a secret of nature, to set bounds to an inclination which is very ungovernable, and, as it has the call of nature for it, always seems, though it rambles, to agree with good moral properties. It, therefore, as a supplement to principles, is highly necessary; for there is no case where the inclination becomes so easily a sophist, to invent agreeable principles, as here. But modesty serves at the same time to throw a mysterious veil even over the fittest and most necessary ends of nature, in order that the too intimate acquaintance with them may not occasion disgust, or at least indifference, with regard to the final designs of an instinct, upon which are grafted the finest and most lively inclinations of human nature. This property is chiefly peculiar to the fair sex, and very befitting to them. It is coarse and contemptible ill-breeding to occasion embarrassment or indignation to this delicate pudicity by that sort of vulgar joking named obscenity. As however, let the mystery be ever so much preserved, the inclination to sex ultimately forms the basis of all other charms, and a woman, as a woman, is always the agreeable subject of a good-mannered conversation; so it may perhaps be thence explained, why men, otherwise polite, sometimes take the liberty of insinuating through their wanton jokes a few fine allusions, which occasion them to be denominated *loose* or *waggish*, and who, as they neither offend by prying looks, nor intend to violate the due reverence, believe to be entitled to name the person, who takes it with a reserved

As it is our intention to judge on feelings, it may not be disagreeable to reduce if possible to conceptions the difference of the impression, which the figure and the lineaments of the fair sex make on the male. This whole
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inchantment is at bottom spread over the instinct to sex. Nature pursues her great design, and all purities, which associate themselves therewith, let them seem to be ever so far removed from it, are but garnitures, and borrow their charm at last from the very same source. One of a sound and *strong taste*, who always keeps very near to this instinct, is little allured by the charm of decency, of features, of eyes &c. &c., in a woman, and, as his sole aim is the sex, he for the most part considers the delicacy of others as empty toying.

Though this taste is not fine, it is not on that account to be despised. For the bulk of mankind by means of it follow in a very simple and secure manner the great order of nature.* Thereby are the greater number of marriages brought about and indeed by the more dilligent part of the human species, and, as the man has not his head filled with bewitching languishing eyes, noble decency &c. &c. and understands nothing of all this; he is more attentive to household virtues, frugality &c. &c., and to the dower. As to the somewhat fine taste, on whose account it may be necessary to make a difference between the outward charms of the ladies; it adheres either to what is *moral* in the form and expression
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* As every thing in the world has its bad side, it is to be regretted, with regard to this taste, that it degenerates more easily than another into debauchery. For as the fire, which one person has kindled, may be extinguished by every other; there are not difficulties enow to bridle an unruly inclination.

of the face, or to what is *not moral*. A woman with respect to the graces of the latter sort is named *pretty*. A well-proportioned shape, regular features, colour of the eyes and complexion, gracefully contrasted, merely beauties which please in a nosegay and acquire a cold applause. The face itself, though it is pretty, says nothing, and speaks not to the heart. With regard to the expression of the lineaments, of the eyes and of the mien, that is moral; it tends to the feeling of either the sublime, or the beautiful. A woman, in whom the *agréments*, that grace her sex, render conspicuous the moral expression of the sublime chiefly, is denominated *beautiful* in the proper sense of the word: she, whose moral delineation, so far as it is conspicuous in the mien or the features, announces the properties of the beautiful, is *agreeable*, and when she is so in a high degree, *charming*. The former under an air of tranquillity and a noble decency displays by modest looks the glitter of a fine understanding, and, as a delicate feeling and a benevolent heart are portrayed in her face, she takes possession as well of the inclination as of the esteem of a male heart. The latter shows sprightliness and wit in laughing eyes, a somewhat fine petulance, jocularity and waggish prudery. She charms, when the other touches, and the sentiment of love, of which she is susceptible and with which she inspires others, is inconstant but beautiful; whereas the sentiment of the other is delicate, combined with reverence, and constant. I don't chuse to enter into too minute

nute dissections of this nature; for in such cases the author always seems to paint his own inclination. But I must still touch on the following: that the taste which many ladies have for a healthy but pale colour, may be here understood. For this commonly accompanies a disposition of mind of more inward feeling and delicate sentiment, which belong to the property of the sublime, whereas the florid and blooming complexion announces less of the former, but more of the gay and sprightly temper of mind; it is however more conformable to vanity to move and to ravish, than to attract and to charm. Persons on the other hand without all moral feeling, and without any expression of sentiment, may be very pretty; but they neither touch nor charm, unless it be that strong taste aforementioned, which sometimes refines itself a little and then chuses in its own way. It is unfortunate, that such beautiful creatures easily fall into the fault of haughtiness, by the consciousness of the elegant figure, which their mirror shews them, and from a want of fine feelings; as then they render every body cold and indifferent towards them, except the flatterer, who has his views and devises tricks.

According to these conceptions something may perhaps be understood of the so different effect, which the figure of the very same woman has on the taste of men. That, which in this impression refers too nearly to the instinct to sex and may agree with the particular voluptuous fancy, with which it clothes
itself

itself, I do not mention here, as it is not within the province of fine taste; and what Buffon presumes may perhaps be right, namely, that that figure, which makes the first impression at the time, when this instinct is yet new and begins to unfold itself, remains the archetype, to which for the future must more or less refer all female shapes, which the phantastical longing may excite, whereby a pretty coarse inclination is obliged to choose among the different objects of a sex. As to the somewhat finer taste, I maintain, that that species of beauty, which we have named the pretty figure, is judged nearly alike by all men, and that the opinions of it are not so different, as is commonly believed. The Circassian and Georgian women have always been held extremely pretty by all the Europeans, who have travelled in their countries. The Turks, the Arabians, the Persians, must be perfectly of this taste, as they are very desirous to embellish their nations by so fine blood, and it may be remarked, that in this the Persian race has actually succeeded. The merchants of Indostan do not fail to derive great advantage from a wicked trade in so beautiful creatures, by bringing them to the rich voluptuaries of their country, and it may be observed, that, let the caprice of taste in the different parts of the world differ ever so much, that, which is once cognised as very pretty in one of them, is held so in all the others. But where in the judgment on the fine figure that which is moral in the features mixes itself, the taste in different men

is always very different, as well accordingly as their moral feeling itself is different, as according to the different signification, which the expression of the physiognomy may have in every one's fancy. One finds, that those shapes, which at first sight have no extraordinary effect, because they are not decidedly pretty, commonly, as soon as they begin to please by a nearer acquaintance, engage much more and seem to embellish themselves continually; whereas the pretty appearance, that announces itself at once, is afterwards perceived with greater frigidity, probably because the moral charms, where they are evident, captivate more, as also because they by occasion of moral feelings put themselves in activity and in a manner discover themselves, but every discovery of a new charm always leaves room to presume still more such; instead of which, all charms, that do not conceal themselves, after they have just at the beginning exercised their whole effect, can afterwards do nothing farther, than cool the enamoured curiosity and bring it gradually to indifference.

Among these observations presents itself naturally the following remark. The whole simple and coarse feeling in the inclinations of the sexes leads directly to the great end of nature and, as it answers her demands, is proper to render the person himself happy without a roundabout; but on account of the great universality it easily degenerates into dissipation and debauchery. A very refined taste, on the other hand, serves to abate the wildness

wildness of a violent inclination and, by restricting it but to a very few objects, to render it modest and decent; but it commonly misses the great final purpose of nature, and as it requires or expects more, than she commonly yields, it is wont to make the person of so delicate a feeling very seldom happy. The former disposition of mind is rude, as it refers to all of a sex, the latter whimsical, by referring properly to none, but is occupied about one object only, which the amorous inclination creates for itself in thought, and ornaments with all noble and beautiful properties, which nature seldom unites in one man, and still seldomer bestows them on him who can value them and would be worthy of such a property. Hence arise the delay and ultimately the total renunciation of the honourable conjunction, or, what is perhaps just as bad, a peevish repentance when a choice, which does not answer the great expectations that were entertained, is once made; for Aesop's cock does not unfrequently find a pearl, when a common barleycorn had suited him better.

We may in general observe, that, let the impressions of the most delicate feeling be ever so charming, there is reason to be careful in the refinement of it, if we would not by a too great irritability bring upon ourselves much ill-humour and find out a source of evils. I would propose to more noble souls, to refine, as much as they can, the feeling relative to those properties, which belong to themselves, or those actions which they

themselves perform, whereas, relatively to what they either enjoy or expect from others, to preserve the taste in its whole simplicity; did I perspect but how this is possible to be done. But in the event of its accomplishment, they would make others happy and likewise be happy themselves. It must always be kept in view, that, in whatever manner it be, no great claim must be laid to the joys of life and to the perfection of men; for he, whose expectations are always moderate, has the advantage, that the issue seldom disappoints his hope, but, on the contrary, is sometimes surprised by unexpected perfections.

At last however age, the great destroyer of beauty, threatens all these charms, and, if the natural order is to be followed, the sublime and noble properties must gradually occupy the place of the beautiful, in order to render a person, as she ceases to be lovely, always worthy of a greater reverence. In my opinion the whole perfection of the fair sex ought in the bloom of years to consist in the beautiful simplicity, elevated by a refined feeling in all that is charming and noble. As the pretensions to charms remit, the reading of books and the enlarging of knowledge might insensibly supply the vacant place of the Graces by the Muses, and the husband ought to be the first instructor. However, when old age, an epoch so terrible to all women, advances, they even then still belong to the fair sex and they disfigure themselves, when, in a sort of despair to maintain this character longer, they
give

give themselves up to a morose and waspish humour.

A woman advanced in years, who graces a society with her modest and friendly behaviour, is affable in a cheerful and rational manner, favours with decency the pleasure of youth, in which she herself has no share, and, while she takes care of every thing, betrays contentment and complacency in the joy she sees around her, is still a finer person, than a man of the same age, and perhaps more amiable than a young woman, though in another sense. Indeed the platonic love, which an ancient philosopher pretended, when he said of the object of his inclination, *the Graces reside in her wrinkles, and my very soul seems to hover on my lips, when I kiss her withered mouth*, may be somewhat too mystical; but such claims must then be relinquished. An old man in love is a gawk, and similar pretensions of the other sex are disgustful. It is never the fault of nature if we appear not with a good grace, but of our endeavouring to pervert nature.

In order not to lose sight of my text, I shall yet make a few observations on the influence which the one sex may have on the other, either to embellish or to ennoble its feeling. Women have chiefly a feeling for the *beautiful*, so far as it belongs to themselves; but for the *noble*, so far as it is to be met with in the male sex. Man on the other hand has a decided feeling for the *noble* that pertains to his properties; but for the *beautiful*, so far as it is to be met with in the

women. Hence must follow, that the ends of nature tend still more to *ennoble* the man by the inclination to sex and still more to *embellish* the woman by the very same inclination. A woman is at no loss, because she does not possess certain deep introspections, because she is timid and not fit for weighty affairs &c. &c.; she is beautiful, she is engaging, and that is enough. Whereas, she requires all these properties in a man and the sublimity of her soul discovers itself but by her knowing to value these noble properties, so far as they are to be met with in him. How would it otherwise be possible, that so many male apish faces, though they may have merit, could get so handsome and fine wives? Man, on the other side, is much more delicate with regard to the beautiful charms of the women. He is by their fine figure, their sprightly *naïveté* and their charming friendliness, sufficiently indemnified for the want of book-learning and for other wants, which he must supply by his own talents. Vanity and modes may easily give a false direction to these natural impulses and of many a man make a *beau*, but of many a woman a *pedant* or an *amazon*; but nature always endeavours to return to her own order. From this may be judged, what potent influence the inclination to sex would have chiefly on the male sex, in order to ennoble them, if, instead of much dry instruction, the moral sentiment of the women were early developed, in order to feel sufficiently what belongs to the dignity and the sublime properties of the other sex, and they

they were thereby prepared to consider the trifling fops with contempt; and to be attached to no other property than merit. It is beyond a doubt that the power of their charms would thereby gain in general; for it is obvious, that their magic for the most part acts but on noble souls, others are not fine enough to feel it. As the poet Simonides, when he was advised to let the Thessaliens hear his fine cantatas, said, These fellows are too stupid to be deceived by such a man as I am. It has always been considered as an effect of the intercourse with the fair sex, that the manners of the men are grown softer, their behaviour more agreeable and more polite; and their address more elegant; however this is but a secondary matter.* The greatest consequence is, that the man as a man grow more perfect and the woman as a woman, that is, that the springs of the inclination to sex act conformably to the hint of nature, to ennoble the one still more and to embellish the properties of the other. When things come to the extreme, the man may boldly say of his merit, Though you do not love me, I will compel you to esteem me, and the women, sure of the might of their charms, answer, Though

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* Even this advantage is very much diminished by the observation, which one pretends to have made, that those men, who have too early and too often frequented such societies, in which women give the ton, commonly grow somewhat trifling, and in the commerce with men are either tiresome or contemptible, because they have lost the taste for a conversation, which must be sprightly, it is true, but of intrinsic value, facetious, or useful by serious discourse.

you do not esteem us profoundly, we will compel you to love us. For want of such principles men may be seen to adopt effeminacies, in order to please, and women sometimes (though much seldomer) to affect a masculine air, in order to inspire esteem; but what is done contrary to the course of nature is always very badly done.

In the connubial life the united pair must in a manner constitute one single moral person, who is animated and governed by the understanding of the man and by the taste of the woman. For not only that more insight grounded upon experience may be attributed to him, and to her more freedom and justness of feeling, but a disposition of mind, the more sublime it is, is the more inclined to place the greatest design of the exertions in the contentment of a beloved object, and on the other hand the more beautiful it is, the more it endeavours to retaliate this exertion. In such a relation therefore a contest for preference is trifling and, where it happens, the surest criterion either of a coarse, or of an unequally matched taste. When it comes to that pass, that the question is concerning the right to command, the matter is already highly spoiled; for, where the whole union is founded but upon inclination, it is, as soon as *shall* begins to be heard, immediately dissolved. The pretension of the woman in this harsh tone is extremely ugly, and of the man in the highest degree ignoble and contemptible. The wise order of things, however, will have it, that all these finenesses and delicacies

cacies of feeling shall have their whole strength in the beginning only, but afterwards by commerce and domestic affairs grow insensibly blunter, and then degenerate into familiar love, where at last the great art consists in preserving sufficient rests of those, in order that indifference and disgust may not destroy the whole value of the pleasure, by which only is requited the entering into such a conjunction.

Among the nations of our kind, the French are the least sensible of the charms of love, and the least capable of the passion. They are too much conversant with the world, and too much conversant with themselves, to be able to give themselves up to the softness of the heart. The Germans, the Italians, and the Spaniards, are more susceptible of the passion. The French may be said to be the least susceptible of it. The French are too much conversant with the world, and too much conversant with themselves, to be able to give themselves up to the softness of the heart. The Germans, the Italians, and the Spaniards, are more susceptible of the passion. The French may be said to be the least susceptible of it.

My design is to give a more exact notion of the character of the French, than what is commonly given of them. I shall not attempt to give a full and complete description of the French, but to give a more exact notion of the character of the French, than what is commonly given of them. I shall not attempt to give a full and complete description of the French, but to give a more exact notion of the character of the French, than what is commonly given of them.

SECTION IV.

OF NATIONAL CHARACTERS, * SO FAR AS THEY
REST UPON THE DISTINCT FEELING OF THE
BEAUTIFUL AND OF THE SUBLIME.

Among the nations of our part of the world the Italians and the French, in my opinion, are those, who distinguish themselves the most by the feeling of the *beautiful*, but the Germans, the Britons, and the Spaniards, by that of the *sublime*. Holland may be held that country, where this fine taste is pretty imperceptible. The beautiful itself is either bewitching and moving, or gay and charming. The former has in it something of the sublime, and the mind in this feeling is melancholy and wrapt up in ecstasy, but in the feeling

* My design is by no means to paint the character of nations at large, but to sketch a few strokes only, which express in those the sentiment of the beautiful and sublime. It may be easily divined, that in such a delineation nothing but a tolerable justness can be required, that its originals are conspicuous but in the great multitude of those, who lay claim to a refined taste, and that no nation is wanting in dispositions of mind, which unite the most excellent properties of this sort. For which reason the censure that may occasionally fall on a nation can offend nobody, as it is of such a nature, as every one may strike it back, like a ball, to his neighbour. Whether these national differences are contingent and depend on the periods and on the modes of government, or are by a certain necessity bound to the climate, I shall not here investigate.

ing of the second species smiling and joyful. To the Italians seems that, to the French this sort of beautiful feeling to be chiefly suitable. In the national character, which has the expression of the sublime in itself, this is either that of the terrific species, that leans a little towards the portentous, or it is a feeling for the noble, or for the magnificent. I believe to have reason to attribute the feeling of the first sort to the Spaniard, that of the second to the Briton, and that of the third to the German. The feeling for the magnificent is according to its nature not original, like the other species of taste; and though a spirit of imitation may be combined with every other feeling, it is more peculiar to that of the glittering: for this is, correctly speaking, a mixed feeling of the beautiful and of the sublime, where every one contemplated apart is colder, and hence the mind is free enough to attend to examples in its connexion and stands in need of their impulse. The German has consequently less feeling relative to the beautiful than the Frenchman, and less of what refers to the sublime than the Briton; but in those cases, where both are to appear combined, it is more conformable to his feeling, as he then happily avoids the faults, into which an extravagant force of every one of these sorts of feeling only can fall.

I shall touch but slightly on the arts and sciences, whose choice can confirm the taste of the nations, which we have ascribed to them. The Italian genius has rendered itself conspicuous chiefly in music, painting, statuary

tuary and architecture.* All these fine arts find for themselves an equally fine taste in France, though their beauty here is less touching. The taste relative to poetical and oratorical perfection falls in France more into the beautiful, in Britain more into the sublime: There are original fine raillery and jesting, comedy, laughing satire, amorous toying, and the easy and naturally flowing style; here, on the other hand, thoughts on profound subjects, tragedy, epic poetry, and in general wit of massy gold which, under the french hammer, may be beaten into very thin broad leaves. In Germany wit glitters much still through folly. Formerly it was brawling, by examples and the understanding of the nation it is indeed grown more charming and noble, but tragedy is with less *naïveté*, and epic poetry with a less bold soaring, than in the above-mentioned nations. The taste of the Dutch nation in a painful order and in a neatness that occasions trouble and embarrassment, leads to presume little sentiment with regard to the artless and free flights of genius, whose beauty is but deformed by the anxious avoiding of faults. Nothing can possibly be more inimical to all arts and sciences, than a strange or portentous taste, as this distorts nature, the archetype of all that is beautiful and noble. Hence the Spanish nation has shown but little

* The translator can venture to affirm, that architecture has attained a higher degree of elegance, magnificence and perfection in Great Britain, than ever it did in any other nation, whether ancient or modern.

little feeling for either the liberal arts or the sciences.

The characters of mind of nations are the most knowable in that which is moral in them; for which reason we shall from this point of view take into consideration their different sentiments relative to the sublime and beautiful.*

The *Spaniard* is serious, reserved, veracious. There are few honester merchants in the world than the *Spaniard*. He has a proud spirit and more feeling for great than for beautiful actions. As in his composition little kind and soft benevolence is to be met with, he is frequently hard and even cruel. The *Auto da fe* maintains itself not so much by superstition, as by the portentous inclination of the nation, which is moved by a solemn horrible procession, wherein they see *San Benito*, painted like a devil, committed to the flames that a mad devotion has kindled. It cannot be said, that the *Spaniard* is more highminded or more amorous, than one of another nation; but he is both in a portentous manner, which is strange and uncommon. To leave the plough and to walk in the field with a sword and a cloak till the traveller is passed, or in a bullfight, where the belles and beauties of the country are but once seen unveiled, to announce

* It will scarcely be necessary to repeat my excuse. The finer part of every nation contains commendable characters of every sort, and if censure should affect the one or the other, he, if he is fine enough, will understand his own interest, by letting every other person take his fate and by excepting himself.

nounce his mistress by a peculiar salutation and then, to do her honour, to run the risk of his life in a dangerous combat with a wild beast, are uncommon and strange actions, which greatly deviate from the natural.

The *Italian* seems to have a mixed feeling, that of a Spaniard and of a Frenchman; more sentiment for the beautiful than the former and more for the sublime than the latter. In this manner may be explained, in my opinion, the other strokes of his moral character.

The *Frenchman* has a predominant feeling for the moral beautiful. He is agreeable, polite and complaisant. He grows very quickly familiar, is jocular and free in conversation, and the expression he or she is *du bon ton* can be understood but by those, who have acquired the delicate sentiments of a Frenchman.* Even his sublime feelings, of which he

* The reader will be pleased to remark, that this treatise was written long before the French Revolution; since which period the character and manners of the French have undergone so great a change, that the fine feelings and amiable qualities, mentioned by our author, have unfortunately given place to properties of a very different nature. With what epithets can we brand a nation, who hold sedition and rebellion sacred duties; who have turned their native country into a bear-garden, where there is neither religion, nor morality, nor liberty, nor property, nor laws, nor justice, nor humanity; whose five atrocious, unrelenting, blood-thirsty tyrants and usurpers, dead to all sense of virtue and honour, have, by propagating democratical and revolutionary principles, by exciting insurrections, by sanguinary invasions and by rapine, plunged almost every surrounding nation into the deepest distress, and seek to fraternise, not only Europe, but the whole World, in the chains of a jacobinical reformation; who know no other glory than that of war, no means of prosperity, but extortion and robbery [*brigandage*]; who believe

he has not few, are subordinate to the feeling of the beautiful, and receive their force but by the consension with the latter. He is very willingly witty and sacrifices, without hesitation, something of the truth to a sally. Whereas, where one cannot be witty, * he shows solid introspection, as well as any person of another nation, for instance, in the mathematics and in the other dry or profound arts and sciences. A *bon mot* with him has not the transitory value as with others, it is eagerly promulgated, and carefully treasured up in books, like the most momentous event. He is a peaceable citizen (!) and revenges himself for the oppression of the Farmers General by satires, or by remonstrances to parliament, which,

to regenerate themselves by superadding to the looseness and corruption of their ancient morals the ignorance, the irreligion, the licentiousness, the ferocity, and the violence and cruelty of barbarians; nay, (to crown these enormities, which must fill the minds of those susceptible of the feelings of humanity with horror and detestation,) who have spilled an ocean of innocent blood, and who sanctify assassination, and poisoning, and murder, and regicide? — But these heinous crimes, at which nature shudders, have been expiated, in some measure, by the total overthrow and ruin of most of their infamous authors, and the remaining few flagitious but hitherto successful villains, thanks to the hydra of democratical disorder, stand tottering upon the brink of destruction!

* In metaphysic, in moral and in the doctrines of religion, one cannot be enough on his guard against the writings of this nation. There commonly prevails in them a great deal of beautiful illusion, which in a cold perquisition does not stand the test. The Frenchman loves the bold in his judgments; but, in order to attain truth, one must not be bold, but circumspect. In history he is fond of anecdotes, to which there is nothing more wanting, than to wish that they were but true.

which, after they have conformably to their design given a beautiful patriotic appearance to the fathers of the nation, are of no farther consequence, than that they are crowned by an honourable mention and celebrated in ingenious panegyrics. The object, to which refer the most the merit and national abilities of the French, are the women.* Not as if they were more loved or esteemed here than elsewhere, but because it affords the best occasion to display the most favourite talents of wit, of agreeableness and of good breeding; besides, a vain person of either sex never loves but himself: others are merely his playthings. As the French by no means want noble properties, only that these can be animated but by the feeling of the beautiful; the fair sex here, were it endeavoured to favour a little this bent of the national spirit, might have a
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* The women in France give the *ton* to all societies and to all intercourse. It is not to be denied, that societies without the fair sex are rather insipid and tedious; but if the lady gives the fine *ton*, in them, the man on his side ought to give the noble. Otherwise the commerce is equally tiresome, but from an opposite ground; as nothing is so cloying as mere sweetness. According to the french fashion, one does not ask, Is your Master at home, but, Is Madam at home? Madam is at her toilet; Madam has the vapours (a species of fine whims); in a word, all conversations, and pleasures, and amusements, are entirely taken up with madam. However, the women are thereby no longer honoured at all. A man who toys is always destitute of feeling or sentiment, as well of true reverence as of delicate love. On no consideration would I have said what Rousseau so audaciously maintained, That a woman never grows any thing but a big child. But the quicksighted Swiss wrote this in France and, as a so great defender of the fair sex, probably felt with anger, that they are not treated there with more real reverence.

more powerful influence to awake and to stir up the noblest action of the other sex, than any thing else in the world. It's a pity that the lilies spin not.

The fault, on which this national character borders the nearest, is, trifling, or; if you chuse a more polite expression, levity. Important matters are treated as sport; and bagatelles serve for a serious occupation. At an advanced period of life the Frenchman still sings lively airs, and is, as much as he can, gallant towards the ladies. In these remarks I have for me great guarantees of this same nation, and shelter myself behind a Montesquieu and a d'Alambert, in order to be secure against every apprehended indignation.

The *Briton* at the beginning of every acquaintance is cold, and indifferent towards a stranger. He has little inclination to small complaisances; on the other hand, as soon as he becomes a friend, he is disposed to render great services. In society he is not solicitous to be witty, or to show a polite behaviour, but he is intelligent and composed. He is a bad imitator, inquires little about what others judge, and follows his own taste entirely. Relatively to the fair he is not of the french agreeableness, but shows far more reverence for them, and carries this perhaps too far, as in the conjugal state he commonly grants his wife an unlimited authority. He is steadfast, sometimes to obstinacy, bold and resolute, frequently to temerity, and commonly acts according to principles, even to inflexibility. He easily becomes singular, not

through vanity, but because he gives himself little trouble about others, and does not easily do violence to his own taste out of complaisance, or imitation; and on that account is seldom so much beloved as the Frenchman, but, when he is known, commonly more esteemed.

The *German* has a mixed feeling of that of a Briton and of a Frenchman, but seems to come the nearest to the former, and the greater similarity with the latter is but artificial and imitated. He has a happy mixture in the feeling as well of the sublime as of the beautiful; and though he does not equal the Briton in the one, or the Frenchman in the other, he, so far as he unites them, surpasses both. He shows more complaisance in society than the former, and does not bring into it so much agreeable vivacity and wit as the Frenchman, yet he manifests therein more discretion and understanding. He is, as in every sort of taste, so in love, pretty methodical and, by combining the beautiful with the noble, in the sentiment of both cool enough, to occupy his head about the considerations of understanding, of magnificence and shew. Hence with him are family, title and rank in the civil relation as well as in love affairs of great importance. He inquires more than the others, What people think of him, and if there is any thing in his character that can excite the wish of a principal amendment; it is this weakness, by which he dares not be original, though he has all the talents fit for being so, and enters too much

much into the opinion of others; which, by making the moral properties inconstant and affected, deprives them of all support.

The *Dutchman* is of an orderly and diligent disposition, and, as he attends merely to the useful, has but little feeling for what in the finer sense is beautiful or sublime. With him a great man and a rich man are synonymous, by a friend he means a correspondent, and a visit that is not productive is very tiresome to him. He contrasts the Frenchman as well as the Briton, and is in some measure a very phlegmatic German.

When we apply these thoughts to any one case, for example, in order to weigh the sense of honour, the following national varieties present themselves. The sense of honour is in the Frenchman *vanity*, in the Spaniard *loftiness* or *highmindedness*, in the Briton *pride*, in the German *fastuousness*, and in the Dutchman *haughtiness*. At first sight most of these words seem to be of the same signification, but from the richness of our language they denote a very obvious distinction. Vanity courts applause, is fickle and changeable, but its outward behaviour is courteous. The high-minded is full of imaginary great merit and does not much court the approbation of others, his demeanour is stiff and lofty. Pride in fact is but a greater consciousness of one's own value, which may be frequently very just, (wherefore it is sometimes denominated a noble pride; but I never can attribute to any body a noble highmindedness, as this always

shews a wrong and exaggerated self-estimation,) the behaviour of the proud man towards others is indifferent and cold. The fastuous is a proud man, who is at the same time vain.* But the applause, which he seeks from others, consists in homage. Hence he willingly glitters by titles, genealogical registers or trees of pedigrees, and pageantry. The German is chiefly subject to this weakness. The words, *Gnädig, Hochgeneigt, Hoch- und Wohlgeb.* and such like bombast, render his language stiff and unwieldy, and impede very much the beautiful simplicity, which other nations can give to their style. The demeanour of a fastuous man in society is ceremonious. The haughty is a highminded person, who manifests in his conduct distinct marks of contempt of others. He is coarse and vulgar in his behaviour. This miserable property is the farthest removed from a refined taste, as it is evidently stupid; for it is certainly not the mean to satisfy the feeling or sense of honour by inviting every body around one through public contempt to hatred and biting mockery.

In love both the Germans and the Britons have pretty good stomachs, somewhat fine feeling, but more sound and strong taste. In this point the Italian is whimsical, the Spaniard

* It is not necessary that a fastuous person be at the same time highminded; that is, form to himself an exaggerated false notion of his excellencies, but he may perhaps not value himself more than he is worth, he has however but a false taste, to render this his value outwardly valid.

Spaniard phantastic, the Frenchman fastidious.

Religion in our quarter of the globe is not an affair of arbitrable taste, but of a more venerable origin. Therefore nothing but the extravagancies in it, and what therein properly belongs to men, can afford signs of the different national characters. I shall reduce these extravagancies to the following chief conceptions: *Credulity, superstition, fanaticism, and indifferentism.* The ignorant part of every nation, though it has no perceptible fine feeling, is for the most part credulous. Persuasion is easily induced by hearsay and a seeming consideration, without any sort of fine feeling containing the springs thereof. Examples of whole nations of this nature must be looked for in the north. The credulous, when he has a portentous taste, grows superstitious. This taste is even in itself a ground to believe something more easily,* and of two men, of whom the one is tainted with this feeling, but the other of a colder and more moderate temper of mind, the former, though he has really more understanding, is sooner misled by his ruling inclination to believe something unnatural, than the latter, who is not guarded

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against

* It is remarked that the English, though so wise a nation, by a bold intimation of a wonderful and absurd thing can easily be induced to believe it at the beginning; of this there are many instances. But a bold or daring disposition of mind, prepared by different experiences, in which many odd things are found true, quickly removes the small doubts, by which a weak and diffident head is soon impeded, and thus without having any merit is sometimes preserved from errors.

against this extravagance by his parts or penetration, but by his common phlegmatic feeling. The superstitious in religion willingly places between himself and the Supreme Object of adoration certain mighty and astonishing men, so to speak, giants of holiness, whom nature obeys and whose conjuring voice opens and shuts the iron gates of Tartarus, who, while they touch heaven with their heads, still have their feet upon the low earth. In Spain the instruction of sound reason has consequently great obstacles to surmount, not because it has to expel ignorance from it, but because it is opposed by a strange taste, to which the natural is vulgar, and which, unless its object is portentous, never believes to feel the sublime. Fanaticism is, so to say, a devout temerity, and is occasioned by a certain pride and a too great confidence in one's self, to approach the heavenly natures and, by an astonishing flight to set one's self above the common and prescribed order. The fanatic speaks but of immediate inspiration and of contemplative life, while the superstitious makes vows before the images of great saints who have wrought miracles, and puts his confidence in the imaginary and inimitable excellencies of other persons of his own nature. Even the strayings and extravagancies, as we have above observed, carry with them signs of national feeling, and so fanaticism,*

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See this word in the preface to the first volume
page viii.

at least in former times, was the most to be met with in Germany and in England, and is in a manner an unnatural excrescence of the noble feeling, which pertains to the character of these nations and, though it is in the beginning impetuous, in general by far not so pernicious as the superstitious bias, since the heat of a fanatical spirit cools by degrees and according to its nature must at last arrive at an orderly moderation, instead of which superstition insensibly takes deeper root in a tranquil and passive frame of mind, and totally deprives the fettered man of the confidence of ever freeing himself from a noxious fancy. Finally, a vain and light person is always destitute of a strong feeling for the sublime, his religion is without emotion and for the most part but an affair of mode, which he follows with every sort of neatness and remains frigid. This is the practical indifference, to which the French national spirit seems to be the most inclined, from which to petulant wicked mockery there is but a single step, and which at bottom, when the intrinsic value is considered, has little preference to a total abnegation.

If we take a cursory view of the other parts of the world; we shall find the *Arabians* to be the noblest men in the east, yet of a feeling that degenerates much into the portentous. They are hospitable, generous, and veracious; but their narrations, their history and their sentiments in general are always interwoven with something marvellous. Their heated imagination exhibits to them things in

unnatural and false drawn images, and even the propagation of their religion was a great adventure. If the Arabians are the Spaniards of the east, the *Persians* are the French of Asia. They are good poets, polite, and have a pretty fine taste. They are not so strict followers of Islam and allow, for their character of mind disposed for merriment, a tolerably mild exposition of the Koran. The *Japanese* may in a manner be considered as the Britons of this part of the world; but scarcely in any other property, than their steadfastness, which degenerates into the utmost stubbornness, their valour and contempt of death. Besides, they show few marks of a refined taste. The *Indians* have a predominant taste for impertinencies, of that sort, which falls into the strange. Their religion consists of impertinencies, idols of a prodigious size, the inestimable tooth of the mighty monkey Hanumann, the unnatural expiations of the Fakirs (heathen mendicant monks) &c., are of this taste. The voluntary sacrifice of the women, on the very same funeral piles that consume their husbands, is an abominable adventure. What trifling impertinencies contain not the longwinded and studied compliments of the *Chinese*; even their paintings are impertinent and represent wonderful and unnatural figures, such as are to be met with nowhere in the world. They have venerable impertinencies too, because they are of very ancient usage,* and

* In Pekin is still performed the ceremony, in an eclipse of the sun or of the moon to turn out with great tintamar
the

and no nation on the face of the earth has more of them than the Chinese.

The *Negroes* of Africa have by nature no feeling, which rises above the trifling. Mr. Hume challenges every body, to produce a single example, where a Negro has shown talents,* and maintains, That among a hundred thousand Blacks, who are transported from their native home, though many of them are emancipated, not a single one of them has ever been found that has performed any thing great, either in the arts or sciences, or shown any other commendable property, though among the Whites there are constantly some, who raise themselves up from among the populace, and acquire consideration in the world by distinguished talents. So essential is the difference between these two races of men, and it appears to be equally great with regard to the mental capacities, as with regard to the colour. The Fetiche-religion so widely diffused among them is a species of idolatry, which perhaps sinks as deep into the trifling, as it seems possible for human nature to admit of. A feather, a cow-horn, a muscle, or any other common thing, the moment it is consecrated by muttering a few words, is an object of adoration, and

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of

the dragon, who would devour these celestial bodies, and thus is preserved a pitiful custom of the most ancient times of ignorance, though mankind are at present better instructed.

* During the American rebellion the translator knew in South Carolina a Negro physician of reputation; and in Antigua a heaven-born Negro preacher, without shoes and stockings.

of invocation in making oath. The blacks are remarkably vain, but in a negro manner, and so loquacious, that they must absolutely be separated by the cogent and conclusive argument of caning.

Among all *Savages* there is no nation, which discovers a character of mind so sublime, as that of *North America*. They have a strong sentiment or sense of honour, and as they, in order to acquire it, seek wild adventures at many hundred miles distance; they are very attentive to prevent the smallest derogation from it, when their bitterest enemy, after he has taken them prisoner, endeavours to force cowardly sighs from them by cruel torments. The Canadian savage is over and above veracious and honest. The friendship, which he establishes, is no less strange and enthusiastic, than any thing ever related of the most ancient and fabulous times. He is extremely proud, feels the whole value of liberty and suffers, even in education, no treatment that would make him sensible of a servile submission; *Lycurgus* in all probability gave laws to such savages; and should a legislator arise among the six nations; a spartan republic would be seen to elevate itself in the new world; the enterprize of the *Argonautes* is little different from the warlike expeditions of these Indians, and *Jason* has no preference over the *Attakakullakulla* but the honour of a Greek name. All these savages have little feeling for the beautiful in the moral sense, and the magnanimous forgiving of an offence, which is at once noble and beautiful,

tiful, is as a virtue not only totally unknown among savages, but despised as pitiable cowardice. Bravery is the greatest merit of savages, and revenge their sweetest voluptuousness. The other natives of this quarter of the globe shew few traces of a character of mind that is disposed to fine feelings, and an extraordinary insensibility constitutes the criterion of this race of men.

When we contemplate the relation of sex in these parts of the world, we find, that the European only has discovered the secret, to deck with so many flowers the sensible *stimulus* of a potent inclination and to interlace it with so much of what is moral, that he has not only greatly heightened its *agrémens*, but rendered them very decent. The inhabitant of the east has in this point a very false taste. As he has no conception of the moral beautiful, that may be combined with this instinct; he sustains the loss of even the value of the sensible pleasure, and his haram is for him a constant source of trouble. He falls into all sorts of impertinencies, one of the principal of which is the imaginary jewel [*mundus muliebris*], of which he endeavours above all things to assure himself, whose whole value consists but in its being broken, and of which in our part of the world in general much roguish doubt is entertained, and for whose preservation he uses very unjust, not unfrequently indelicate means. Hence the women there are always in prison, whether they be unmarried, or have a barbarous, impotent, and always suspicious husband. In the

the countries of the blacks, what can be expected to be met with, but a thorough and most abject slavery of the female sex? A coward is always a strict master of the weak, as with us those, who have scarcely dared to appear before any one out of their own house, are always tyrants of the kitchen. Father Labat mentions, that a negro carpenter, whom he upbraided with highminded procedure towards his wives, returned for answer: You whites are great fools, for ye first allow your wives too much, and afterwards complain, when they put you mad. It would seem as if there were in this something, which perhaps merits to be taken into consideration; but this fellow was from the crown of his head to the very soles of his feet jet-black; a direct proof, that what he said was stupid. Among all savages there are none, by whom the female sex are more really respected, than by those of Canada. In this they perhaps surpass even our civilized part of the world. Not as if one did the women there humble services; these are but compliments. No, they actually command. They assemble and deliberate concerning the most weighty affairs of the nation, concerning peace and war. On this they send their delegates to the counsel of the men and their voice commonly decides. But they purchase this prerogative dear enough. They have the whole burden of the household affairs, and take a share in all the hardships of the men.

If finally we cast an eye to history, we see the taste of men, like a Proteus, always assuming

assuming various forms. The ancient times of the Greeks and Romans showed distinct marks of a genuine feeling for the beautiful as well as for the sublime, in the art of poetry, statuary, architecture, in legislation and even in morals. The government of the Roman emperours changed as well the noble as the beautiful simplicity into the magnificent, and then into the false show, of which the remainder of their eloquence, poetry, and even the history of their manners may inform us. This rest of fine taste was extinguished by degrees with the total fall of the state. The barbarians, after they had in their turn established their power, introduced a certain perverted taste, named gothick, which turned entirely on impertinencies. Impertinencies were to be seen not only in architecture, but in the sciences and usages. The degenerate feeling, being once conducted by false art, assumed every other unnatural form, than the old simplicity of nature, and was either exaggerated or trifling. The highest flight that the human genius took to rise to the sublime consisted in monstrosities. Both spiritual and mundane adventures were seen, and frequently a contrary and prodigious bastard sort of both. Monks, with the missal in the one hand and the banner in the other, whom whole hosts of deceived victims followed, in order to have their bones interred in other climates and in a holier land, consecrated warriors, hallowed by solemn promises to acts of violence and to crimes, afterwards an uncommon sort of phantasts,

phantasts, who styled themselves knights and went in quest of adventures, tournaments, duels, and romantic actions. During this period religion, together with the sciences and manners, was deformed by miserable impertinencies, and it was remarked, that taste does not easily degenerate in one point, without exhibiting in every other distinct signs of its corruption in all that pertains to refined taste. The monastic vows made of a great part of useful men numerous societies of busy idlers, whose fancymonger-mode of life rendered them fit to brood thousands of scholastic impertinencies, which went thence into the wide world and disseminated their species. At last, after the human genius has, by a sort of *palingenesis*, happily recovered itself from an almost total destruction, we see flourish in our days the just taste of the beautiful and noble as well in the arts and sciences as with regard to moral, and there is nothing more to be wished for, than that the false glitter, which so easily deceives, may not insensibly lead us away from the noble simplicity; but especially, that the yet undiscovered mystery of education be rescued from the old fancy, in order to exalt by times the moral feeling in the breast of every young citizen of the world to an active sentiment, that all fineness or delicacy may not tend to the merely fleeting idle pleasure, to judge that which happens around us with more or less taste.

S O M E T H I N G
O N T H E
I N F L U E N C E O F T H E M O O N
O N T H E
T E M P E R A T U R E O F T H E A I R.

S O M E T H I N G

O N T H E

I N F L U E N C E O F T H E M O O N

O N T H E

I N F L U E N C E O F T H E M O O N

S O M E T H I N G

ON THE

INFLUENCE OF THE MOON

ON THE

TEMPERATURE OF THE AIR.

Professor Lichtenberg of Goettingen, in his usual lively and thoughtful manner, says somewhere in his writings that, 'The moon ought not indeed to have influence on the temperature of the air; but yet she has influence on it.'

A. The position, 'She ought not to have it.' For we know but two faculties, by which she can have influence on our earth at so great a distance: her *light*,* which she as a body illuminated

* By occasion of the *weakness* of the moon's light to be observed here, even in comparison but with the proper radiating light of a fixed star, which the moon is about to cover, may I be permitted to add a conjectural explanation to an observation of Mr. Schroeter in Lilienthal, so well deserving on account of the more exact knowledge of the figure of the mundane bodies (Astronomical Treatise 1793. page 195). 'Aldebaran (it is said) disappeared not directly by the advancing of the moon; and (as Mr. S. observed both the moon's edge and Aldebaran with the strictness to be wished for) he was visible in the disk during 2 or 3 seconds fully: when, without my observing

illuminated by the sun reflects; and her power
of

in him any diminution of light or an altered diameter, he vanished so suddenly, that during the vanishing not near a whole, but perhaps a half second only, at least certainly not much more, elapsed.' This phenomenon is, in my opinion, to be attributed, not to an optical illusion, but to the *time*, which the light requires to come from the star at the distance of the moon to the earth, which is about $1\frac{1}{2}$ of a second, within which Aldebaran was covered by the moon. Whether now during the bethinking that the star is seen within the face of the moon (not merely in contact with her), as also during the perception and the consciousness that he has now disappeared, the other $\frac{2}{3}$ of a second (which are not sufficient for observation) may not have passed away; therefore the true and the opinative, though inevitable, apparent observations do not amount to the 2 seconds (as Mr. S. grants as much): must be left to the proper judgment of this acute and exercised observer.

According to other admirable discoveries of his, concerning the structure of the moon's surface, the half of the moon turned to us appears to be a body similar to a burned volcanic dross, and uninhabited. But when it is assumed that the eruptions of the elastic substances from her interior, so long as she was in the state of fluidity, directed themselves more towards the side turned to the earth, than to the side turned from it (which, as the difference of the attractions of the former by the attraction of the centre of the moon is greater, than that between the attraction of the centre and the side turned away from the earth, and elastic matter ascending in a fluid extends itself the more, the less it is pressed, must, when this mundane body became rigid, have left greater excavations in its interior in the former than in the latter half); it may be easily conceived, that the centre of gravity would not coincide with that of the bulk of this body, but would be towards the side that is turned away from the earth, the consequence of which would then be that the water and air, which may be upon this satellite of the earth, quit the former side, and, by flowing to the latter, have thereby rendered it only inhabitable. — Besides, whether the moon's property, to turn round her axis in the same time in which she performs her revolution, may from the same cause (namely, the difference of the attraction of both halves in a moon that revolves round its planet, on account of its much greater nearness to this planet, than that of the planet to the sun) be assumed as peculiar to all moons, must be left to be decided by those, who are more versed in the theory of attraction.

of attraction which, as the cause of gravity, is common to her with all matter. Of both we can sufficiently point out as well the laws, as, by their effects, the degree of their efficacy, in order to explain from those, as causes, the alterations which they occasion; but to excogitate new hidden powers for the behoof of certain phenomena, which are not in conjunction, sufficiently confirmed by experience, with those already known, is an attempt, which a sound natural philosophy does not easily make. And it, for instance, refuses to give credit to the pretended observation that fish laid in the moonshine putrify sooner, than those lying in the shade of the moon: as the moonlight, concentrated by even the greatest burning-glasses or mirrors, has not the least perceptible effect on the most sensible thermometer; — but yet to have some regard to the observation that the death of those ill of fevers, is, in Bengal, during the time of a solar eclipse, very much hastened by the influence of the moon; because her attraction (which at this time unites itself with the sun) unambiguously shows by other experiences its faculty of acting very perceptibly upon the bodies of the earth.

When it is then to be decided *à priori*, Whether the moon has or has not influence on the temperatures of the air, the light, which she throws on the earth, cannot be in question; by consequence there remains nothing but her power of attraction (according to universal laws of gravitation), from which this action upon the atmosphere must be explicable.

Now her immediate action by this power can consist in the augmentation or diminution of the gravity of the air only; but this, if it shall be sensible, must be observed by the barometer. Therefore the above judgment (A) would be thus expressed, The alterations of the barometer regularly harmonizing with the moon's positions cannot be rendered comprehensible from the attraction of this satellite of the earth. For

1. It may be proved *à priori* that the moon's attraction, so far as the weight of our air may be thereby increased or diminished, is far too small for this alteration to be observed by the barometer (Lulof's Introduction to the mathematical and physical Knowledge of the terrestrial Globe, § 312): whether the air be thought as a *fluid* (not an elastic) matter, where its surfaces, by the direction of their gravity altered by the attraction of the moon, keep quite horizontal; or at the same time, as it actually is, an *elastic fluidity*, where it is still the question, whether its equally dense strata would at different heights remain in *aequilibrio*, but to explain which latter is here not the place.

2. Experience evinces the insufficiency of the moon's attraction for a sensible alteration of the gravity of the air. For it would need, like the flux and reflux, to show itself by the barometer twice in 24 hours; but of which the smallest trace is not perceived.*

B. The

* One must form to himself but right conceptions of the attractions of the moon and of the sun, so far as they may

19 B. The *antithesis*, 'The moon has nevertheless an influence (partly observable by the barometer, partly otherwise visible) on the temperature of the air.' — The temperature of the air (*temperies aeris*) contains two parts, wind, and weather. The latter is either merely visible, as a clear, partly pure, partly clouded, and partly over-cast heaven; or sensible, cold or warm, damp or dry, in breathing refreshing or oppressive. The same temperature of the air does not always, though it does frequently

may have immediate influence on the barometer. When the sea (and likewise the atmosphere) flows, and the columns of this fluid ascend, many represent to themselves that their weight (like the pressure of the air upon the barometer) must, according to the theory, grow greater (consequently the mercury in the barometer be higher); but it is directly inverted. The columns ascend but because they grow lighter by the external attraction; as they now in the open sea never get time enough to attain the whole height, to which they by means of that attraction would rise, if the sun and moon remained in the position of their greatest united influence; so at the place of the greatest flood the pressure of the sea (and likewise the pressure of the air upon the barometer) must be smaller, consequently the mercury in the tube lower, but at the time of ebb higher. — So far the rules of Toaldo harmonize perfectly well with the theory, namely, that the mercury in the barometer in the syzygias falls, but in the quadratures rises; if the latter could but render comprehensible, how the attractions of those celestial bodies can in general have a sensible influence on the barometer.

But as to the extraordinary height of the sea in straits and long bays, chiefly at the time of the spring flood, it is not at all taken into the account in our problem, because it is not occasioned immediately and hydrostatically by attraction, but only mediately, by a motion of the current proceeding from that alteration, therefore hydraulically; and the winds too may be disposed in the same manner, when they, put in motion by that attraction, are obliged in a sea of an island to blow through capes, straits, and narrow passes remaining open but to them.

quently, accompany the same wind; whether a local cause, altering the mixture of the air and together with it the temperature of the air, produces a certain wind, or this the temperature of the air, is not always to be made out: and with the same state of the barometer, though it were in harmony with the position of the moon according to a certain rule, different sorts of weather may be combined.— If the alteration of wind, however, is directed by the variation of the moon as well of herself, as in conjunction with the vicissitude of the four seasons; the moon, though the *weather* cannot be determined according to her, has influence (either directly or indirectly) on the *temperature of the air*, by consequence the discovered rules are more serviceable to the seaman than to the landman. But in favour of this assertion analogies, at least previously sufficient, are obvious, which though they do not equal the astronomically computed laws of a calendar, merit attention as rules, to have regard to that temperature in future meteorological observations. To wit,

1. At the time of the new moon may almost always be observed *endeavours*, at least, of the atmosphere, to alter the direction of the wind, which end either in the wind's returning to its old place after a little wavering, or (when it has wholly or in part run over the compass chiefly in the direction of the diurnal motion of the sun) in its assuming a place, in which it prevails the whole month throughout.

2. Every quarter of a year, at the time of the solstices and equinoxes and of the next new

new moon after them, this endeavour is yet more distinctly perceived; and, whichever wind predominates the first two or three weeks after the new moon, usually prevails the whole three months.

To these rules the predictions of the weather in the calendar seem for some time past to have had regard. For, as the common man himself pretends to have observed, they fall out at present better, than before this calendar: probably because its author may have now consulted Toaldo. So it was however good at last, that the design to bring into vogue *calendars without superstition* (like the rash determination of a Williams, A public propounding of religion without the bible), did not succeed. For the author of that popular book, in order not to misuse the credulity of the people till they become totally incredulous and he consequently lose his credit necessary for a great sale, is now obliged to trace the rules of the temperatures of the air formerly found out, though not fully ascertained, to render them by degrees more determinate, and to bring them nearer, at least, to the certainty of an experience: so that the belief formerly adopted blindly from superstition may finally pass to a belief not merely *rational*, but even *reasoning* on the grounds. — Hence the places in the calendar for the signs, *Good for planting, good for cutting down timber for building*, may still remain; since, whether the moon, as on the kingdom of organised nature in general, so in particular on the vegetable kingdom, be not actually allowed a sensible influence,

influence, is not yet so clearly made out, and those philosophically skilled in gardens and forests are thereby invited to supply, if possible, even this want of the public. Only, the signs, which may mislead the common man and induce him to try dangerous experiments upon his health, must be indispensably left out.

Here is now a collision between the *theory*, which denies a faculty to the moon, and *experience* that grants it.

The Removing of this Collision.

The attraction of the moon, her only motive power, by which she can have influence on the atmosphere, and perhaps on the temperatures of the air likewise, acts *directly upon the air according to statical laws*, that is, so far as this is a *ponderable fluidity*. But hereby the moon is too unable to occasion a sensible alteration on the state of the barometer, and, so far as the temperature of the air *immediately* depends upon the cause of that state, on this cause likewise, consequently (according to A) she ought so far to have no influence on the temperature of the air. — But when one assumes an *imponderable matter* (or material substances) extending itself (or themselves) far above the height of the *ponderable* air (and on that account more exposed to alteration by a stronger attraction of the moon), covering the atmosphere, which matter, moved by the moon's attraction and thereby either
mixed

mixed at different times with our air, or separated from it, is able by the *affinity* with the latter (therefore not by its weight) partly to strengthen, partly to weaken its elasticity, and so *mediately* (namely, in the former case the occasioned deflux of the lifted-up columns of air, in the latter by the afflux of the air to the lowered) to alter its weight; * it is found possible, that the moon may have influence *indirectly* on the alteration of the temperature of the air (according to B), but properly according to chymical laws. — But between

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the

* This exposition properly refers but to the correspondence of the temperature of the air with the state of the barometer (therefore to A); it still remains to explain from the same principle that of the winds with the aspects of the moon and of the seasons (according to B), in all sorts of weather and states of the barometer (whereby it is always to be well-noticed, that absolutely but the influence of the moon and perhaps the much smaller one of the sun likewise, but only by their attraction, not by the heat, are in question). It is astonishing that the moon in the aforementioned astronomical points should place and predetermine wind and weather in a different manner over different countries though lying in the same latitude. But as several days, nay weeks, are required to the establishment and determination of the prevailing wind, in which time the actions of the moon's attraction on the gravity of the air, by consequence on the barometer, must annul one another, and therefore can produce no precise direction of it; so I cannot otherwise render in any manner comprehensible to myself that phenomenon, than by conceiving many motions, without and beside one another, or even within one another (including one another), circular or vortical, occasioned by the moon's attraction, analogical to the *typhones*, of that imponderable matter extending beyond the atmosphere; which motions, according to the difference of the ground (of the waters, of the mountains, and even of the vegetation upon them) and its chymical reaction, may make its influence on the atmosphere different in the same parallel circle. But here experience quits us too much, even but to *opine* with tolerable probability,

the thesis. The moon has no influence *directly* on the temperature of the air, and the anti-thesis. She has an influence *indirectly* on it, there is no contradiction.

This imponderable matter must perhaps be assumed as *incoercible* also (not to be shut up); that is, such a substance, as cannot otherwise be shut up by other substances, than by its being in chymical affinity with them (such as has place between the magnetic effluvium and iron only), but which acts freely throughout all the others; when the *communion* of the air of the higher (*jovial*) regions, lying beyond the region of lightning, with the subterraneous (*volcanic*) air, found deep under the mountains, which manifests itself not indistinctly in many meteors, is taken into consideration. Perhaps thereto belongs likewise the quality of the air, which renders some diseases, in certain countries, at a particular time, *epidemic* (properly speaking raging), and which shows its influence not merely on a *nation* of men, but on a nation of a certain species of animals or of plants, whose vital principle doctor Schaefer in Ratisbone, in his ingenious book *On Sensibility*, places not *in them*, but in an *external* matter, analogous to that imponderable matter, pervading them.

This *something*, then, is but small, and indeed little more than the acknowledgment of ignorance; but which, since a *de Luec* has proved to us, that we by no means perspect what a cloud is, and how it is possible, (a matter, which was perfectly easy twenty years ago), can no longer be very surprising
and

and astonishing. — This is exactly circumstanced as our catechism, which in our youth we perceived to a hair and believed to understand thoroughly, but which, the older and the more considerate we grow, the less we understand, and for that reason, if we could but find any body else that understood it better, well deserve to be sent back again to school.

But when Mr. de Luec hopes that a more diligent observation of his cloud may one day or other still afford us insight of great consequence to chymistry; this is not to be thought of, but it was probably cast as a stumblingblock only for the antiphlogistics. For its laboratory lies in a region, whereat we cannot arrive to make experiments; and it may with reason be sooner expected that chymistry will furnish new insight into meteorology, than *vice versa*.

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 For his laboratory lies in a region, where
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 it may with reason be sooner expected that
 chemistry will furnish new insight into me-
 technology, than vice versa.

HISTORY
AND
PHYSIOGRAPHY
OF THE
MOST REMARKABLE CASES
OF THE
EARTHQUAKE
WHICH TOWARDS THE END OF 1755 SHOOK
A GREAT PART OF THE EARTH.

HISTORY

AND

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MOST REMARKABLE CASES

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EARTHQUAKE

WHICH TOOK PLACE AT THE END OF 1857

A GREAT PART OF THE EARTH.

HISTORY
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OF THE
EARTHQUAKE

WHICH TOWARDS THE END OF 1755 SHOOK
A GREAT PART OF THE EARTH.

Nature has not spread every where, in vain, a treasure of rarities for contemplation and admiration. Man, who is intrusted with the oeconomy of the earth, not only possesses a capacity, but takes a pleasure in learning to know it, and through his introspections glorifieth the Creator. Even the terrible instruments of the visitation of the human species, the shakings of countries, the raging of the ocean, that is violently agitated to its very bottom, the volcanos or mountains that cast out flames, summon men to contemplation, and are not less implanted in nature (by God) as a just consequence of constant laws, than other usual causes of incommodity [unpleasant consequences], which are holden more natural, only because we are better acquainted with them.

The

The contemplation of such dreadful events is edifying. It humbles man, by showing him that he has no right, or at least that he has lost it; to expect convenient consequences only from the laws of nature, which God hath ordered, and he perhaps learns in this manner to perspect That this arena of his desires ought not equitably to contain the aim of all his views.

PREPARATION.

Of the Nature of the Earth in its Interior.

We know pretty completely the surface of the earth, when the ampliation * is concerned. But we have under our feet a world still, with which we at present are but little acquainted. The chasms of the mountains unfathomable to our plummet, the caverns which we meet with in the bowels of the mountains, the deepest shafts of the mines, that we enlarge during centuries, are far insufficient to procure us distinct knowledge of the internal structure of the great globe we inhabit.

The greatest depth, to which men have descended, does not amount to 500 fathoms; that is, the six thousandth part of the distance to the centre of the earth, and yet these caverns
are

* Enlargement of knowledge, in contradistinction to exactness; extension opposed to intension.

are still found in the mountains, and even all *terra firma* is a mountain, in which, in order to arrive but at an equal depth with the bottom of the sea, we must go down at least thrice as deep.

But what nature hides from our eye and from our immediate essays, she herself discovers by her effects. The earthquakes have revealed to us that the surface of the earth is full of vaults and cavities, and that under our feet hidden mines with various labyrinths run every where. The progress of the history of earthquakes will put this beyond a doubt. These cavities we have to ascribe to the very same cause, which prepared the beds for the seas. For it is certain, when one is informed of the remains of the ocean's former stay over the whole earth, of the immense heaps of muscles that are found even in the bowels of the mountains, of the petrified seaanimals, which are brought up from the deepest shafts, I say, when one is in some measure informed of all these, he may easily perspect that formerly the sea covered all the land, that its stay continued long and is older than the deluge, and that the water could not possibly retire otherwise, than by its bottom here and there sinking into deep cavities, and preparing the same deep bason, into which it has run, and to whose brims it is still confined, while the elevated parts of this sunk-in crust are become *terra firma*, which is every where undermined by cavities, and whose tract is occupied by the steep ridges, which under the name

of mountains run through the highest parts of the land according to all those directions, in which it extends itself to any considerable length.

All these cavities contain a glowing fire, or at least that combustible matter, which requires but a small stimulation, in order to break out into a violent flame all around it and to shake or even to split the earth above it.

When we consider the territory of this subterraneous fire in the whole circuit, in which it extends, we must allow that there are few countries upon the earth, which have not sometimes felt its effect. The island of Iceland, in the remotest part of the north, is subjected, and indeed not seldom, to its most violent shocks. In England and even Sweden there have been a few gentle concussions. They are however to be found in the southern countries, in my opinion, in those that lie nearer the equator, more frequent and stronger. Italy, the Islands of all the seas, which lie near the equinoctial line, chiefly those in the Indian ocean, are disturbed by this agitation of their bottom. Among the latter there is scarcely a single one that has not a mountain, which either burns sometimes still, or at least did formerly burn; and they are just as much subjected to concussion. It is a curious precaution, if we may believe Hübners account of it, that the Dutch take, in order not to expose the valuable spices of nutmegs and cloves, which they allow to be cultivated on the islands of Banda and Amboina

boina only, to the danger of being extirpated from the earth, if a total destruction by an earthquake should happen to these islands, by always having a nursery of both plants upon another island at a great distance. Peru and Chili, that lie near the line, are more tormented by this evil, than any other country in the world. In the former a day seldom passes without a few small shocks of an earthquake being felt. This must not be considered as a consequence of the far greater heat of the sun, which acts upon the earth of these countries. In a cave, that is not quite 40 feet deep, there is hardly any difference to be distinguished between summer and winter. So little is the solar heat able to penetrate the earth to great depths, in order to act upon the inflammable matter and to put it into commotion. The earthquakes rather accommodate themselves to the nature of the subterranean caverns and these to those laws, according to which must have taken place at the beginning the sinkings of the uppermost crust of the earth, which, the nearer to the line, have made the deeper and more various bendings inwards, whereby these mines, that contain the tinder for the earthquakes, are grown more extensive and thereby fitter for its incension.

This preparation by what we have said on the subterraneous passages is of no small importance to the insight of that which will afterwards occur of the wide extending of earthquakes in great countries, of the tracks they pursue, of the places, where they rage

the most, and of those where they first take their rise.

I shall now begin from the history of the earthquake of 55 itself. I understand by it no history of the misfortunes, which men have thereby suffered, no list of cities destroyed and inhabitants buried under their ruins. Every thing horrible, which the imagination can represent to itself, must be collected, in order in some measure to figure to one's self the consternation, in which men must be, when the earth under their feet moves and is torn with convulsions, when every thing around them falls to the ground, when the water put in violent motion completes the misfortune by overflowing, when the fear of death, the despair on account of the total loss of all property, and finally the sight of others in misery discourage the most steadfast mind. Such a narrative would be moving, it would, as it has an effect on the heart, perhaps have one likewise on its amendment. But I leave this history to more able hands, and shall here describe the work of nature only, the remarkable natural circumstances, which accompanied the dreadful event, and their causes.

Of the Forerunners of this Earthquake.

I look upon the prelude of the subterranean inflammation, that afterwards grew so amazing, to be the meteor, which was perceived at Locarno

came in Switzerland on the 14th. october 1754 at 8 o'clock in the morning. A warm vapour, as if coming out of an oven, diffused itself and in two hours turned into a red fog, which towards evening occasioned a rain red as blood, that, when it was caught, deposited $\frac{1}{2}$ of a reddish gluy sediment. The snow six feet deep was likewise tinged red. This purple rain was perceived to extend about 20 german miles in *quadratum*, nay, even to Suabia. On these meteors followed unnatural rains, that in three days made the water rise 23 inches, which is more than falls throughout the whole year in a country of a moderately damp nature. This rain continued upwards of 14 days, though not always with the same violence. The rivers in Lombardy that have their source in the mountains of Switzerland, as also the Rhone, swelled and overflowed their banks. From this time prevailed in the air frightful hurricanes, which raged every where furiously. In the middle of november such a purple rain fell in Ulm, the disorder in the atmosphere, the whirlwinds in Italy, and the extremely wet weather continued. If we would form a conception of the causes of this phenomenon and of its consequences, we must observe the nature of the ground, upon which it happened. All the mountains of Switzerland contain extensive cavities, which without doubt are connected with the deepest subterraneous passages. Scheuchzer numbers nearly 20 gulfs, which at certain times emit wind. If we suppose that the mineral substances hidden in these cavities are mixed and

thereby occasion with those fluidities, with which they effervesce, an internal fermentation, which may prepare the materials nourishing the fire for that inflammation, that in a few days is to break out entirely; if, for instance, we represent to ourselves that acid, which is contained in the spirit of nitre, and which nature herself necessarily prepares, how it, put in motion either by the afflux of water or by other causes, attacked the earth containing iron, upon which it fell; these substances must have been heated by their being mixed, and have ejected red warm vapours from the caverns of the mountains, wherewith by the violence of the ebullition the particles of the red earth containing iron were at the same time mingled and carried away, which occasioned the *gluy rain red as blood* of which we have made mention. The nature of such vapours tends to diminish the expansive power of the air, and thereby to make the aqueous exhalations suspended in it run together, as also by the attraction of all the humid clouds floating in the ambient atmosphere, by means of the natural declivity towards the region, where the height of the columns of air is lessened, to occasion that violent and constant rain in the countries aforementioned.

In this manner the subterranean fermentation previously announced by ejected vapours the misfortune, which it prepared in secret.*

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* Eight days before the concussion the ground near Cadix was covered by a multitude of worms that had crept

The achievement of destiny followed it with slow steps. A fermentation does not immediately break out into inflammation. The fermenting and heating substances, in order to produce incension, must meet with a combustible oil, sulphur, petrol, or something of the same sort. The heating extends itself here and there in the subterraneous passages, and the moment, when the dissolved combustible substances are heated in the mixture with the others to the degree to catch fire, the vaults of the earth are shaken, and the decree of the fates is fulfilled.

*The Earthquake and the Agitation of the Water
of the 1st. November 1755.*

The moment, at which this shock happened, seems to be the most accurately determined at 50 minutes past 9 o'clock a. m. at Lisbon. This time exactly agrees with that, at which it was perceived in Madrid, from 17 to 18 minutes after 10 o'clock, when the difference of latitude of both cities is turned into the difference of time. At the same time the waters, as well those that have a visible, as those that may have a hidden, communica-

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creeped out of the earth. Only the adduced cause drove them out. Of several other earthquakes violent lightning in the air, and the fear that animals show, have been the precursors.

tion with the ocean, were shaken to an astonishing circuit. From Abo in Finland to the Archipelago of the West Indies few or no coasts were free from it. Almost at the same time it commanded a tract of 1500 german miles. Were one assured that the time, at which it was felt at Glückstadt on the Elb, might according to the public accounts be fixed at 30 minutes past 11 o'clock, it would thence be concluded, that the agitation of the water took 15 minutes to come from Lisbon to the coasts of Holstein. At this very time it was likewise felt on all the coasts of the mediterranean, and its whole extent is not yet known.

The waters, that appear to be deprived of every communication with the sea, the sources of mineral water, the lakes, were at the same time put into an extraordinary commotion in many countries far distant from one another. Most of the lakes in Swisserland, the lake near Templin in the March, some lakes in Norway and Sweden, were put into an undulation far more boisterous, than in a storm, and the air was at the same time calm. Both the lakes of Neuschatel and of Meinungen, if we may rely upon the accounts, ran into hidden cavities, but soon returned. At this very moment the mineral water of Toeplitz in Bohemia stopped, and returned red as blood. The force, with which the water was driven, widened its old passage, and it thereby acquired a greater afflux. The inhabitants of this place might well sing *te Deum laudamus*, while those of Lisbon uttered quite other tones. Such is the nature of the incidents
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that befall the human species. The joys of the one and the misfortunes of the other have frequently a common cause. In the kingdom of Fez in Africa, a subterraneous power split a mountain and poured water out of its gulf. Near Anguleme in France a subterranean noise was heard; a deep cavern opened itself on the plain and contained unfathomable water. At Gemenox in Provence, a fountain grew suddenly slimy and ran afterwards of a reddish colour. The surrounding countries gave notice of similar alterations in their sources. All these took place at the same minute that the earthquake laid waste the coasts of Portugal. Here and there during this short term of time a few concussions of the earth were perceived in far distant countries. But they almost all happened near the coast. At Cork in Ireland, as also at Glueckstadt and at several other places that lie near the sea small quakings happened. Milan is perhaps at the greatest distance from the sea of any place that was this day shaken. This morning at 8 o'clock Vesuvius raged and was quiet towards the time, when the concussions happened at Portugal.

*Contemplation of the Cause of this Agitation
of the Water.*

History affords no example of a commotion of all the waters and of a great part of the earth so extensive and at the same time in

the course of a few minutes. Hence circumspection is necessary, in order to gather the cause of it from a single case. The following causes, especially, which may have produced this event of nature, may be conceived. By a concussion of the bottom of the sea every where immediately under those places, where the sea was shaken; but a reason must be given, why the veins of fire, which produced these concussions, run under the bottom of the seas, without extending themselves under the countries that are more nearly conjoined with these seas and frequently interrupt their communication. One would find himself perplexed by the question, Whence the concussion of the bottom, as it extended itself from Glueckstadt on the north sea to Lubeck on the east and to the coasts of Mecklenburgh, was not felt in Holstein, which lies in the middle betwixt these seas, and only a slight shaking was felt near the coast, but none in the interior parts of the country? But one is the most distinctly convinced by the undulation of the waters far distant from the sea, as of the lake of Templin, of those in Switzerland and others. It may be easily imagined that, in order to put water into an undulation so violent by the shaking of the bottom, the concussion must certainly not be small. But why did not all the circumjacent countries, under which the vein of fire must of necessity have run, feel this violent shock? It is easily seen that all the criteria of truth are contrary to this opinion. A concussion, which is impressed around on the solid

solid mass of the earth itself by a violent shock happening at a place, as the ground shakes at a considerable distance, when a powdermill blows up, in the application to this case loses all probability, as well from the cause assigned, as on account of the prodigious compass which, when it is compared with the compass of the whole earth, makes up a part of it so considerable, and whose concussion must necessarily draw after it a shaking of the whole globe. But we may learn from Buffon, that an eruption of subterraneous fire, which a mountain of 1700 miles long and 40 broad might throw a mile high, could not displace the earth an inch.

We have then to seek the extending of this agitation of the water in a medium that is fitter for communicating a concussion to great distances, to wit, the water of the sea itself, which is in connexion with that, which is put into a violent and sudden commotion by an immediate shaking of the bottom of the sea.

In the Weekly Intelligencer of Koenigsberg I endeavoured to estimate the force, where-with the sea is pushed on in the whole compass by the stroke proceeding from the concussion of its bottom, supposing the shaken place of the bottom of the sea but as a square, whose side is equal to the distance of Cape St. Vincent from Cape Finisterre, that is, the length of the west coasts of Spain and Portugal, and considering the force of the rising ground, like that of a mine of powder, which in springing is able to throw the bodies, that are
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upon it, 15 feet high, and, according to the rules, by which the motion in a fluid matter is continued, found it greater on the coasts of Holstein than the most rapidly advancing current. Let us here contemplate from another point of view the force, which it used from these causes. Count Marsigli found the greatest depth of the mediterranean to be by the lead upwards of 8000 feet, and it is certain that the ocean at a proper distance from the land is yet deeper: but we shall here suppose 6000 feet only, that is, 1000 fathoms deep. We know, that the weight, with which a column of sea water presses upon the bottom of the sea, must exceed almost 200 times the pressure of the atmosphere, and that it still far exceeds the force of the fire behind a ball, which is projected from the cavity of a cannon in the space of a pulsation to the distance of 100 fathoms. This prodigious weight could not resist the force, with which the subterraneous fire quickly ascended, by consequence this *vix motrix* was greater. By what pressure then was the water confined, in order to fly out suddenly towards the sides? and is it astonishing, if within a few minutes it is felt both in Finland and in the West Indies. It is not possible to be made out, how great the basis of the immediate concussion may have been; it is perhaps much greater than we have assumed it; but among the seas, where the agitation of the water was felt without any earthquake, on the coasts of England, Holland and Norway and on the east sea it was certainly not to be met with in the bottom of the sea.

For

For then the *terra firma* too would have certainly been shaken in its interior parts, but which was by no means observed.

Though I ascribe the violent concussion of all the continuous parts of the ocean to the single shock, which its bottom suffered in a certain circuit, I do not mean on that account to deny the actual diffusion of the subterraneous fire under the *terra firma* of almost all Europe. In all probability they happened at the same time, and both had part in the phenomena that came to pass, only that one in particular is not to be considered as the sole cause of them all. The commotion of the water in the north sea, which occasioned a sudden shock, was not the effect of an earthquake raging under the bottom. Such concussions must be very violent, in order to produce the like effect, and must have therefore been very sensibly felt under the *terra firma*. But I do not disown on that account that even all *terra firma* is put into a gentle vacillancy, by a weak power of vapours inflamed under its bottom or of other causes. This is seen with regard to Milan, which was threatened on this same day with the greatest danger of a total overthrow. We shall then lay down that the earth was by a gentle vacillation put into an easy motion, which was so great, that it, in 100 Rhine yards, shook the earth backwards and forwards to the distance of an inch; and this motion would be so insensible, that a building of 4 yards high could not thereby be put out of the perpendicular position more than half a grain,

grain, that is, the half of the back of a knife, which even on the highest towers would be scarcely perceptible. Whereas the lakes must have rendered this insensible motion very perceptible. For if a lake is but two german miles long, its water would be very strongly shaken by this small vacillancy of its bottom. For the water has then in 14000 inches about an inch of fall, and a run, which is nearly but about the half smaller, than the run of a very rapid river; as the levelling of the water of the Seine near Paris may teach us; which, after a few vacillations, may have well occasioned an extraordinary shaking of the water. But we may with good reason assume the motion of the earth as great again, as we have done, without its being easily felt on the *terra firma*, and then the motion of the lakes is the more obvious and comprehensible.

It needs no longer surprise, if all the lakes in Switzerland, in Sweden, in Norway and in Germany, without feeling a shake of the bottom, are discovered so troubled and boiling up. But it is found somewhat extraordinary that certain lakes during this disorder even dried up; as the lake of Neuschatel, that of Como and of Meinungen, though some of them soon filled again. This event, however, is not without example. There are some lakes, which at certain times run out quite orderly by hidden canals, and return at a stated period. The lake of Cernitzer in the Dutchy of Carniola is a remarkable instance of this. It has in its bottom a few holes, but through which it does not run off sooner, than towards
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St. James', when it suddenly disappears with all the fishes and, after having left its bottom during three months as dry as a good meadow or a field, towards november suddenly returns. This event of nature is very conceivably explained by the comparison with the diabetes of the hydraulics. But in the cases before us it may be easily imagined that, as many lakes receive an afflux from the springs under their bottom, those, which have their head in the neighbouring heights, after the effect of the subterraneous heat and evaporation has consumed the air in the cavities, which are their reservoirs, must thereby have been drawn into them, and even have furnished a powerful suction to carry in with them the lake which, after a re-established equilibrium of the air, sought its natural issue again. For that a lake, as was endeavoured to be explained by the public accounts of that of Meinungen, is maintained by the subterraneous communication with the sea, because it has no external afflux by brooks or streamlets, is, as well on account of the laws of equilibrium opposing it, as on account of the saltness of the sea water, exposed to a palpable absurdity.

The earthquakes have this, as something common to themselves, that they put the sources of water into disorder. I could here produce, from the history of other earthquakes, a whole register of sources that stopped at one place and broke out at another, of fountain-water gushing very high out of the earth and such like; but I will not depart from my subject. We have intelligence that
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in several parts of France some sources have stopped, and others discharged an immense quantity of water. The source of warm water at Toeplitz disappeared, made the poor inhabitants uneasy, and returned first muddy, then red as blood, and at last natural and stronger than before.* The coloration of the water in so many countries, even in the Kingdom of Fez and in France, is according to my conception to be ascribed to the mixture of vapours fallen into fermentation with sulphur and particles of iron, pressed through the layers or strata of earth, where the sources have their passage. When these vapours penetrate into the interior parts of the cisterns, which contain the source of the mineral waters, they either drive these out with great force, or, pressing the water into other passages, alter their efflux.

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* It is remarkable that this earthquake was not felt at Carlsbad, which is but thirteen german miles distant from Toeplitz. The waters of Carlsbad (in Bohemia) are likewise warm, to 58. Reaumeur, and one of the best deobstruents perhaps in Europe. They contain mineral alkali, Glauber and culinary salt, with somewhat calcareous earth, and fixed air; are very efficacious in gouty cases, the stone and gravel, and a sovereign remedy in complaints of the stomach and bowels. During the space of six consecutive years the translator drank upwards of seven thousand goblets of this water, and was radically cured of inveterate obstructions and haemorrhoids. This doctor Damm of Carlsbad, who is not only a skilful and learned, but a successful physician, can attest. The late doctor Becher wrote a treatise on these waters, which contains a valuable description and practical treatment of the diseases of the *primæ viæ* and of the abdomen in general. Another happy circumstance is that Eger (where there is a most excellent steel water, which contains much more purgative salt than Pyrmont water, and which is a safe and powerful corroborant after the use of the Carlsbad waters,) is in the vicinage.

These are the chief curiosities and most singular circumstances of the history of the first of november, and of the agitation of the water. It is extremely credible to me that the concussions of the earth, which happened close to the seashore, or of water that has communication with the sea, in Cork in Ireland, Glueckstadt, and here and there in Spain, are for the most part to be attributed to the pressure of the confined seawater, whose force must be incredibly great, when the violence, with which it dashes, is multiplied by the plane, which it strikes. And I am of opinion that the misfortune of Lisbon, as well as that of most of the other cities on the west coast of Europe, is to be ascribed to the situation, which it had with regard to the moved part of the ocean, as its whole force, augmented besides in the mouth of the Tagus by the narrowness of a bay, must extraordinarily shake the bottom. Let it be judged, whether the concussions, which were not sensible in the interior of the country, could have been distinctly felt in the cities only, which lie on the seashore, if the pressure of the water had not had a share in them.

The last phenomenon of this great event is remarkable, as a considerable time, from an hour to an hour and a half after the earthquake, an astonishing accumulation of the water of the ocean, and a swelling of the Tagus, which rose six feet higher than the highest flood, and soon after fell almost as much lower than the lowest ebb, were seen. This motion of the sea, which took place a

considerable time after the earthquake, and after the amazing pressure of the water, completed the destruction of the city of Satuval, by rising above its rubbish, and totally ruined what the concussion had spared. When one has previously formed a just conception of the violence of the seawater pushed forward by the moved bottom of the sea, he may easily represent to himself that it must, after its pressure has extended itself through all the immense regions around, return with violence. The time of its return depends on the great compass, in which it acted around it, and its ebullition, chiefly on the coasts, must according to that have been just as terrible.*

The Earthquake of the 18th. November.

From the 17th. to the 18th. of this month, the public accounts gave notice of a considerable earthquake on the coasts, as well of Portugal as of Spain, and in Africa. On the 17th. at 12 o'clock it was felt at Gibraltar, and towards the evening at Whitehaven in Yorkshire. On the 17th. and 18th. it was in the then English colonies of America. On the 18th. it was violently felt in the neighbourhood of Aquapendente and della Grotta in Italy.**

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* In the harbour of Husum the ebullition of the water was perceived between 12 and 1, therefore an hour later, than the first shock of the water in the northsea.

** As also at Glowson in the county of Hertford, where with a dreadful noise it opened an abyss, in which is contained very deep water.

The Earthquake of the 9th. December.

According to the testimony of the public accounts, Lisbon suffered no such violent shocks since the 1st. november, as those of the 9th. december. This earthquake was felt on the southern coasts of Spain, on those of France, through the mountains of Swisserland, Suabia, and Tyrol as far as Bavaria. It ranged from southwest to northeast, about 300 german miles and, keeping in the direction of that chain of mountains, which runs along the greatest height of the *terra firma* of Europe according to its length, did not extend itself much sideways. The most careful geographers Varen, Buffon & Lulof observe, that, as all land, which extends more in length than in breadth, is crossed in the direction of its length by a principal mountain, the chief tract of the mountains of Europe from a head stock, the Alps, extends towards the west through the southern provinces of France, through the middle of Spain to the utmost shore of Europe towards the west, though it shoots out on the way considerable collateral branches, and in like manner to the east, through the Tyrolese mountains and other less considerable ones, unites at last with the Carpathian mountains.

The earthquake ran through these in this direction the same day. If the time of the concussion of every place were accurately noted, the velocity might in some measure be estimated, and the situation of the first inflammation in all probability determined;

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but the accounts agree so little, that with regard to them nothing can be relied upon.

I have already mentioned that the earthquakes, when they extend themselves, commonly keep the tract of the highest mountains through their whole extent, though these, the more they approach the seashore, grow the less. The direction of long rivers denotes very well the direction of the mountains, since those run between the parallel rows of these, as in the lowest part of a long valley. This law of the extension of earthquakes is not an affair of speculation or of judgment, but is known by the observation of many earthquakes. The testimonies of Rai, Buffon, Gentil &c. must therefore be adhered to. But this law has of itself so much probability, that it must easily acquire assent. When one reflects that the openings, whereby the subterraneous fire seeks vent, are nowhere else than in the summits of the mountains; that gulfs casting out flames are never perceived in the plains; that in the countries, where earthquakes are violent and frequent, most of the mountains have wide mouths, that serve to eject the fire, and that, as to our European mountains, roomy cavities, which are no doubt connected, are no where discovered but in them; and when the conception of the generation of all these subterranean vaults, above spoken of, is applied to these, no difficulty will be found in the representation, how the inflammation, chiefly under the chain of mountains, which run through the length of Europe, can meet with open
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and free passages, in order to extend itself quicker therein, than towards other regions.

Even the continuation of the earthquake of the 18 NOV. from Europe to America, under the bottom of a wide sea, is to be sought in the connexion of the chain of mountains, which chain, though in the continuation it grows so low, as to be covered by the sea, remains the same mountain. For we know, that as many mountains are to be met with in the bottom of the ocean, as upon the land; and in this manner the Azores, that lie half way between Portugal and North America, must be placed in this connexion.

The Earthquake of the 26. December.

After the incension of the mineral substances had penetrated the main trunk of the highest mountains of Europe, the Alps, it opened for itself the narrower boundary under the chain of mountains, which runs rectangularly from south to north, and extends itself in the direction of the Rhine which, like all rivers in general, occupies a long valley between two ridges of hills, from Switzerland to the northsea. It shook on the west side of the river the provinces of Alsace, Lorraine, the electorate of Cologne, Brabant and Picardy, and on the east side Cleves, a part of Westphalia, and probably a few countries lying on this side of the Rhine, of which no accounts have been given. It evidently kept a tract parallel to the direction of this

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great river, and extended itself not far from it towards the sides.

It may be asked, how, as it penetrated into the Netherlands, which are not very mountainous, it can accord with what has been above said? But it is enough that a country is in an immediate connexion with certain ridges of mountains, and to be considered as a continuation of them, in order to carry on the subterraneous inflammation under this low ground. For it is certain that then the chain of cavities extends under it, in the same manner as it continues under the bottom of the sea, as aforesaid.

Of the Intervals that pass between some Earthquakes following one another.

When the consequence of the concussions that have happened after one another is contemplated with attention, a period, in which the inflammation after an intervening cessation broke out anew, might, if one chose to hazard a conjecture, be discovered. We find after the 1st. november a very violent concussion in Portugal on the 9th. as also on the 18th. as it extended towards England, Italy, Africa, and even to America. On the 27th. a strong earthquake on the southern coasts of Spain, chiefly in Malaga. From this time it continued 13 days, till it on the 9th. december ran through the whole tract from Portugal to Bavaria from southwest towards northeast, and since this, at the expiration
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of 18 days, to wit, the 26th. to the 27th. december it shook the breadth of Europe from south to north,* so that, when that time, which it took to penetrate into the bowels of the mountains of our *terra firma*, and on the 9th. december to move the Alps and the whole length of their chain is assumed, in general a pretty exact period of 9 or twice 9 days has passed between the repeated inflammations. I do not produce this with a view of concluding any thing from it, because the accounts are far too little authentic for that purpose, but in similar cases in order to give occasion to more accurate observation and reflection.

I shall here adduce but something in general of the concussions reciprocally remitting and recommencing. Mr. Bouguer, one of the deputies of the Royal Academy of Sciences in Paris to Peru, had the inconvenience of making some stay in this country near a burning mountain, whose thundering noise allowed him no rest. The observation, which he made on this occasion, might in some degree indemnify him, as he remarked that the mountain was always quiet at equal periods, and its ragings followed one another in an orderly manner with exchanged points of rest. The remark, Mariotte made on a limekiln, which

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* On the 21st. it was very violent in Lisbon, on the 23d. in the mountains of Roussillon, and continued there till the 27th. From this it may be seen that it began again from the southwest and required a much longer time to extend. And when the place of incension, which is clear from the whole course of the earthquake, is placed in the ocean of Portugal towards the west, its beginning is tolerably connected with the period in hand.

was kindled, and sometimes ejected the air out of an open window, sometimes drew it back again, whereby it in some measure imitated the respiration of animals, has a great similarity with this; both depend upon the following causes. When the subterraneous fire inflames, it forces all the air out of the cavities around it. Where this air, which is filled with the igneous parts, finds an opening, for instance, in the mouth of a volcano, it rushes out, and the mountain casts out flames. But as soon as the air is driven from the compass of the hearth of inflammation, the inflammation remits; for without the access of air all fire extinguishes. In like manner the eruptions of a burning mountain vary regularly at certain intervals. It is the same with the subterraneous inflammations, even where the expanded air can find no issue through the caverns of the mountains. For when the inflammation begins at a place in the cavities of the earth, it forces the air to a great extent into all the passages of the subterranean vaults that are connected therewith. At this moment the fire chokes for want of air. And as soon as this expansive power of the air remits, that air, which was diffused through all the cavities, returns with great force and blows up the smothered fire into a new earthquake. It is remarkable that Vesuvius, which, when the fermentations in the bowels of the earth began well, was put in motion and set on fire by the issue of the air forced through his mouth, suddenly remitted soon after, when the earthquake happened at Lisbon; for all the air in
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any connexion with these cavities, and even that which is above the summit of Vesuvius, rushed through all the channels to the hearth of inflammation, where the diminution of the expansive power of the air allowed it access. What an astonishing object! To represent to one's self a chimney which, by air holes or vents, at 200 german miles distance, affords a sure draught!

It is the very same cause, which must produce in the cavities of the earth subterranean storms, whose force, if the situation and connexion of the cavities were suitable to their extension, would far exceed every thing, which we perceive upon the surface of the earth. The noise, that in the progress of an earthquake is heard under the feet, is probably to be attributed to no other cause than this.

From this we may presume with probability that not just all earthquakes are occasioned by the inflammation's happening directly under the ground which is shaken; but that the fury of the subterraneous storm may shake the vault that is above them; of which will be the less doubted, when one reflects that a much denser air, than that upon the surface of the earth, may by far more sudden causes than these be put in motion and, strengthened between passages that impede its extending, exercise an unheard-of power. It may likewise be presumed that the slight vacillancy of the ground in the greater part of Europe during the violent inflammation, which happened in the earth on the first of november, is perhaps to be derived from nothing but

this violently agitated subterraneous air, which like a heavy storm gently shook the ground that opposed its diffusion,

Of the Hearth of the subterraneous Inflammation, and the Places which are subjected to the most frequent and most dangerous Earthquakes.

By the comparison of the time we learn that the place of incension of the earthquake of the first of november was in the bottom of the sea. The Tagus that swelled before the shake, the sulphur, which the mariner's lead brought up from the shaken bottom, and the violence of the concussion, which the sailors felt, confirm it. The history of former earthquakes gives to know that in the bottom of the sea the most frightful concussions have always happened, and next to this at the places upon the seashore or not far from it. As a proof of the former I produce the raging fury, with which the subterraneous inflammation has frequently raised up new islands from the bottom of the sea and, for instance, in the year 1720, near the island St. Michael, one of the Azores, from a depth of sixty fathoms threw up, by an ejection of matter from the bottom of the sea, an island, which is one mile long and elevated some fathoms above the surface of the sea. The island near Santorino

torino in the mediterranean, which in our century in the presence of several persons rose from the bottom of the sea, and many other examples, which, in order to avoid prolixity, I pass over, are proofs of this not to be rejected.

How often do seamen suffer, so to say, a seaquake; and in many countries, chiefly in the vicinity of certain islands, the sea is plentifully filled with pumice and other sorts of ejections of a fire broken out through the bottom of the ocean. The observation of the numerous concussions of the bottom of the sea is naturally connected with the question, Why of all places of the *terra firma* none are subjected to more violent and more frequent earthquakes, than those that lie near the seashore? This latter position is undoubtedly just. Let us run over the history of earthquakes, and we shall find innumerable misfortunes happen through earthquakes to cities or countries, which are near the seashore, but very few and those of little consequence, that are perceived in the middle of the *terra firma*. Ancient history informs us of astonishing devastations, which this evil made upon the seacoasts of Little Asia, or Africa. But neither among them nor among the more modern do we find considerable concussions in the heart of great countries. Italy, which is a peninsula, most of the islands of all the seas, that part of Peru, which lies on the coast, suffer the greatest attacks of this evil. And in our days all the western and southern coasts of Spain and Portugal have been much more shaken, than

than the interior parts of these countries. Of both questions I give the following solution:

Of all the continuous cavities under the uppermost crust of the earth, without doubt those, which run under the bottom of the sea, must be the narrowest, because there the continued bottom of the *terra firma* has sunken to the greatest depth, and must rest much lower upon its undermost basis, than the places that lie towards the middle of the continent. But it is known that in narrow cavities a kindled expansive matter must act more furiously around it, than where it can extend itself. Besides, it is natural to believe that, as is not to be doubted of the subterraneous incension, the effervescing mineral and inflammable substances very often fall into fusion, as the streams of brimstone and lava, which are frequently poured from the volcanos, may show; since on account of the natural declivity of the bottom of the subterranean cavities they must have always run towards the lowest cavities of the bottom of the sea, and also on account of the abundant store of inflammable matter, more frequent and more powerful concussions must have here happened.

Mr. Bouguer conjectures, not without reason, that the penetrating of the seawater, by the opening of a few chinks in the bottom of the sea, must put the mineral substances, naturally inclined to inflammation, into the most violent ebullition. For we know that nothing can put heated minerals into a more amazing fury, than the afflux of water, which
constantly

constantly augments it, till its force extending itself on all sides prevents the further access of the water by ejecting all sorts of earthy substances and stopping up its opening.

For aught I know the chief violence, with which a country lying upon the coast is shaken, takes its origin in part very naturally from the weight, wherewith the seawater loads its neighbouring bottom. For every body easily perspects that the force, with which the subterraneous fire endeavours to raise up this vault, upon which a weight so prodigious rests, is greatly kept back and, as it finds here no space for its extending, must turn its whole force towards the bottom of the dry land that is next it.

*Of the Direction, according to which the Ground
is shaken by an Earthquake.*

The direction, according to which the earthquake extends in wide countries, is different from that, according to which the ground, on which it exercises its power, is shaken. When the uppermost covering of the hidden cavity, wherein the inflamed matter expands itself, has an horizontal direction, it must be reciprocally elevated and depressed in a perpendicular posture, because there is nothing that can turn the motion more to one side than to another. But if the layer of earth, which constitutes the vault, inclines to one side, the shaking power of the subterranean
fire

fire forces it up in an oblique direction towards the horizon, and the direction, according to which the vascillation of the ground must constantly take place, might be come at, if that, according to which the stratum of the earth slopes, under which is the gulf of fire, were always certainly known. The declivity of the uppermost surface of the shaken ground is no sure criterion of the oblique position, which the vault has in its whole thickness. For the layers of earth that lie above may form various bendings and hillocks, to which the undermost foundation by no means accommodates itself. Buffon is of opinion, that all the different strata, which are found upon the earth, have for a basis an universal fundamental rock, which covers all the close deep cavities, and some parts of which upon the summits of high mountains are commonly bare, where rain and storms have totally washed away the loose substance. This opinion acquires by what earthquakes give to cognise great probability. For a power raging in such a manner, as earthquakes do, would by the frequently renewed assaults have long ago destroyed any other than a rocky vault.

The declivity of this vault is on the coast without doubt inclined towards the sea, and therefore declivous in that direction, according to which the sea lies to the place. On the bank of a great river it must be declivous in the direction of the stream. For when the very long tracts, frequently more than some hundred miles, through which the rivers bend their course on the continent, without forming
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on the way standing pools or lakes, are contemplated, this uniform declivity cannot well be explained by any thing, but that very firm foundation which, as it uniformly inclines to the bottom of the sea without frequent bendings inward, affords the river an oblique plain for running off. Hence it is to be presumed that the vacillation of the ground, upon which stands a shaken city that lies near a great river, happens in the direction of this river, as in the Tagus from west and east;* but of that, which lies upon the coast, in the direction, according to which this inclines to the sea. I have elsewhere mentioned what the situation of the ground may contribute, when an earthquake happens to destroy a city totally, whose principal streets run in the same direction, as the ground is declivous. This is not a sally of mere conjecture; it is a matter of experience. Gentil, who had occasion to collect excellent knowledge of a great many earthquakes, gives notice of this as an observation, which is confirmed by many examples, that when the direction, according to which the ground is shaken, runs parallel with the direction, according to which the city is built, it is quite overthrown, whereas when that intersects this rectangularly, less damage happens.

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* As a river has a gradual descent towards the sea, so have the countries on the sides a slope to its bed. If the latter is valid of the stratum of the whole earth, and this in the greatest depths has such a declivity, the direction of the concussion of the earth is determined by these.

The history of the Royal Academy of Paris gives an account that, when Smyrna, which lies on the eastern coast of the mediterranean, was shaken in 1688, all the walls, which had the direction from east to west, were thrown down, but those, that were built from north to south, stood.

The shaken ground makes a few vacillations, and moves every thing, that is erected upon it according to the length in the direction of the vacillation, the most. All bodies, which have a great mobility, for instance, girandoles in churches, during earthquakes usually point out the direction, according to which the shocks happen, and are far surer criterions for a city to discover the situation, according to which it must be built, than the somewhat more doubtful signs already mentioned.

Of the Connexion of Earthquakes with the Seasons.

The french academist Mr. Bouguer, whom we have frequently quoted, mentions in his voyage to Peru that, though earthquakes happen often enough in that country at all seasons, the most dreadful and the most frequent are felt in the autumnal months. This observation is not only abundantly confirmed in America, as, besides the destruction of the city Lima ten years ago and the sinking of another city equally populous in the preceding century,

century, many instances of it have been noticed, but in our part of the world, besides the last earthquake (of 1755), we find many examples in history of concussions and ejections of burning mountains, which have taken place more frequently in autumn, than in any other season. Does not a common cause give occasion to this agreement? and what cause is more probable than the rains, which continue in Peru in the long valley between the Cordilleras from september to april, and which are likewise the most frequent, with us during harvest? We know that, in order to occasion a subterraneous conflagration, nothing else, than to put in fermentation the mineral substances in the cavities of the earth, is necessary. But this is done by water, when it has penetrated into the clefts of the mountains and run into the deep passages. The rains first stimulated the fermentation, which in the middle of october forced out of the bowels of the earth so many extraneous vapours. But these drew from the atmosphere still more humid influxes, and the water, which penetrated through the chinks of the rocks into the most profound cavities, finished the inflammation that was begun.

Of the Influence of Earthquakes on the Atmosphere.

We have above seen an example of the effects which the convulsions of the earth

have on our air. It is to be believed that more phenomena of nature depend upon the eruptions of subterraneous heated exhalations, than one commonly imagines. It would scarcely be possible that such an irregularity and so little harmony could be met with in the temperatures of the air if extraneous causes did not sometimes put the proper alterations of our atmosphere into disorder. Can a probable ground be conceived, why, as the course of the sun and of the moon is always fixed to the same laws, as water and earth, taken in the gross, always remain the same, the flux of the temperatures of the air, even one with another during many years, falls out almost always different? Since the unfortunate concussion and a little before it we have had in all our part of the world so variable a temperature of the air, that we cannot but suspect the earthquakes on that account. It is true, there was formerly warm weather in winter, without any previous earthquake; but is one sure that a fermentation in the bowels of the earth has not very often forced vapours through the chinks of the rocks, the slits of the layers of earth, and even through their loose substance, which may have drawn after them considerable alterations in the atmosphere? Muschenbroek, having observed that only since 1716 a very clear aurora borealis has been seen in Europe and in its southern countries, holds the probable cause of these alterations in the atmosphere, that the volcanos and the earthquakes, which some years before raged violently, threw out inflammable and volatile exhalations, which

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by the natural deflux of the highest air accumulated towards the north, and produced the fiery phenomena of the air, which have since been so frequently seen, and that in all probability they must consume by degrees, till new exhalations supply the diminution.

According to these principles let us investigate, Whether it be not conformable to nature, that an altered temperature of the air, like what we have had, may be a consequence of that catastrophe. The clear temperature of the winter-air, and the cold that accompanies it, are not merely consequences of the great distance of the sun from our vertex at this season. For we frequently feel that, notwithstanding that, the air may be very temperate; but the draught of air from the north, which at times ends in an eastwind, brings us a cooled air from the frigid zone, that covers our waters with ice, and lets us feel a part of the winter of the northpole. This draught of air from the north to the south is in the autumnal and hibernal months, unless foreign causes interrupt it, so natural, that in the ocean at a sufficient distance from all *terra firma*, this north or northeast-wind is the whole time throughout uninterruptedly met with. It proceeds quite naturally from the effect of the sun, which then rarifies the air above the southern hemisphere, and thereby occasions the draught from the northern, so that this must be considered as a constant law, which by the nature of the countries may in some measure be altered, but not annulled. When subterraneous fermentations

eject somewhere in the countries that lie towards the south heated vapours, these in the beginning diminish the height of the atmosphere in the region, where they rise, by weakening its expansive power, and occasion showers, hurricanes &c. But afterwards this part of the atmosphere, as it is loaded with so many exhalations, moves the neighbouring part by its weight, and occasions a draught of air from south to north. However, as the effort, which the atmosphere in our climate makes at this season from north to south, is natural, both these motions opposing one another are stopped and, on account of the accumulated vapours, occasion clouds and rain, and also a high state of the barometer,* because the air compressed by the conflict of two winds must occasion a high column; and one thereby understands the apparent irregularity of the barometer, when, notwithstanding the great height of the mercury, there is rainy weather. For then this humidity of the air is an effect of two currents of air opposing one another, which collect the vapours and yet can render the air considerably denser and heavier.

I cannot pass over in silence, That on the frightful day of all saints the magnets in Augsburgh threw off their load, and the magnetic needles were thrown into disorder. Boyle relates that the like once happened in Naples after

* As has been, during this humid temperature of the air in winter, almost constantly noticed.

after an earthquake. We know too little of the hidden nature of the magnet to assign a reason for this phenomenon.

Of the Use of Earthquakes.

One startles to see a rod of correction of men so frightful commended on the score of utility. I am certain that, in order to be delivered but of the fear and danger, which are combined with it, men would willingly give it up. Of such a nature are we men. After we have laid an unjust claim to all the *agrémens* of life, we are not disposed to purchase any advantages with charges. We desire that the earth might be so conditioned, that one could wish to live upon it for ever. We imagine besides, that, if Providence had consulted us, every thing would have been better regulated for our advantage. We, for instance, wish to have the rain in our power, in order that we might divide it throughout the whole year according to our conveniency, and always enjoy agreeable days between the cloudy ones. But we forget the springs, which we cannot do without, and which could not at all be supplied in such a manner. We are ignorant of the use that the causes, which frighten us in the earthquakes, may be of to us, and yet would willingly discard them.

As men, who were born to die, why cannot we bear that a few should die by an earthquake, and as such, who are strangers here below and possess no property, why are we

inconsolable, when goods, which had shortly been abandoned by the universal way of nature, are lost?

It may be easily divined that, when men build upon a ground, which is filled with inflammable substances, sooner or later the whole magnificence of their building may be destroyed by concussions. But must they on that account be impatient of the ways of Providence? Were it not better to judge thus: It was necessary, that earthquakes should sometimes happen upon the earth; but it was not necessary for us to build upon it gorgeous habitations. The inhabitants of Peru dwell in houses, whose foundations only are of stone, the rest consists of reeds. Man must learn to accommodate himself to nature; but he would have nature to accommodate herself to him.

Whatever damage the cause of earthquakes may have occasioned men on the one side, it can easily make it up with interest on the other. We know that the warm baths, which in process of time may perhaps have been serviceable to a considerable part of mankind for re-establishing health, owe their mineral property and warmth to the very same causes, from which happen in the bowels of the earth the inflammations that shake it.

It has been long presumed that the ores in the mountains are a slow effect of the subterraneous heat which, by forming and boiling the metals in the heart of the rock by penetrating vapours, brings them to perfection by gradual effects.

Our

Our atmosphere, besides the coarse and inert substances, which it contains, requires a certain active principle, volatile salts and parts that may enter into the composition of plants, in order to move and to develope them. Is it not to be believed that the formations of nature, which constantly use a great part of them, and the alterations that all matter ultimately suffers, by solution and composition, would in time totally consume the most active particles, unless from time to time a new afflux took place? At least the earth grows always weaker, when it nourishes vigorous plants; but rest and rain restore it. But whence would the corroborative matter, which is used without reparation, come at last, if another source did not supply its afflux? And this is probably the store, which the subterranean cavities contain of the most active and most volatile substances, of which they from time to time diffuse a part upon the surface of the earth. I have still to observe that Hales by the fumigation of sulphur happily purified the prisons, and in general all places, whose air was infected by animal exhalations. The burning mountains throw out into the atmosphere an immense quantity of sulphureous vapours. Who knows but the animal exhalations, with which the atmosphere is loaded, would in progress of time become noxious, if those mountains did not furnish a powerful remedy against it. In fine, the warmth in the bowels of the earth seems to me to afford a stronger proof of the efficacy and of the great use of the inflammations.

flammations that happen in profound cavities. By daily experiences it is made out, that, in great, nay, in the greatest depths, at which men have arrived in the internal parts of the mountains, there is an everduring warmth, which cannot possibly be attributed to the effect of the sun. Boyle cites a considerable number of testimonies, from which it is evident that during summer in all deep shafts the upper part is much colder, than the external air; but the deeper one goes down, it is found the warmer; so that in the greatest depths the workmen are obliged during their work to pull off their clothes. Every body easily comprehends that, as the heat of the sun penetrates but to a very small depth in the earth, it cannot have the smallest effect in the lowest cavities; and that the warmth there depends on a cause, which prevails but in the greatest depths, this is *besides* to be perceived from the diminished warmth, the higher one ascends even in summer. Boyle, after having carefully compared and proved the experiences that were made, concludes very rationally, That in the undermost cavities, at which we cannot arrive, constant inflammations must be to be met with, and an inextinguishable fire, that communicates no warmth to the upper crust, is thereby kept up. If the matter is thus, which one cannot but grant, have we not to promise ourselves the most advantageous effects from this subterranean fire, which always furnishes the earth with a soft matter, at the time when the sun withdraws his influence from us, and
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which is able to forward the vegetation of plants and the œconomy of the kingdom of nature. And with the appearance of so much usefulness can the disadvantage, which arises to the human species from a few eruptions of this fire, free us from the gratitude we owe Providence for all his dispositions.

The grounds, I have adduced for encouraging it, are indeed not of the nature of those, which afford the greatest conviction and certainty. But even conjectures, when the object is to move men to the desire of being grateful to the Supreme Being who, even when he chastiseth, is worthy of adoration and love, deserve to be assumed.

Observation.

I mentioned above that earthquakes force out sulphureous evaporations through the vault of the earth. The last accounts of the shafts in the mountains of Saxony confirm this by a new example. At present they are found so full of sulphurous vapours, that the workmen must leave them. The event at Tuam in Ireland, where a luminous meteor appeared upon the sea in the form of flags and pendants, which altered their colours by degrees and at last diffused a clear light, on which followed a violent shock of an earthquake, is a new confirmation of this. The alteration of the colours from the darkest blue to red and ultimately to a clear white appearance is to be ascribed to the broken-out, at

first very rarefied, evaporation that is gradually augmented by a more copious afflux of more exhalations which, as is known in natural philosophy, must pass through the degrees of light from the blue colour to the red, and finally to a white appearance. All these preceded the shock. It is a proof that the hearth of inflammation was in the bottom of the sea, as the earthquake was chiefly felt upon the shore.

If one chose to extend farther the observations on the places of the earth, where the most frequent and the heaviest shakes have ever been felt, it might still be added, that the western coasts have always suffered many more attacks, than the eastern. In Italy, in South America, nay, lately in Ireland, experience has confirmed this agreement. Peru, which lies upon the seacoast of the new world, has almost daily concussions, whereas Brasil, that has the ocean towards the west, feels nothing of them. If one had a mind to conjecture a few causes of this strange analogy, a Gautier, a painter, might well be forgiven, when he looked for the cause of all earthquakes in the rays of the sun, the source of his colours and of his art, and imagined that these, by beating stronger on the western coast, turn our great globe round from west to east, and by that these coasts are troubled with so many shakes. But in a sound natural philosophy such a thought scarcely merits a refutation. The ground of this law seems to me to be in conjunction with another, of which no sufficient explanation has been given, namely,

namely, that the western and southern coasts of almost all countries are more steeply declivous, than the eastern and northern; which is confirmed, as well by the map, as by Dampiers accounts, who found them almost universally so in all his voyages. When the bendings of the land are derived from the sinkings-in, deeper and more numerous cavities must be to be met with in the countries of the greatest declivity, and where the crust of the earth has but a gentle slope. But, as we have above seen, this has a natural connexion with the concussions of the earth.

Concluding Contemplation.

The sight of so many miserable persons, as the last catastrophe has made among our fellow-citizens, ought to excite philanthropy, and make us feel a part of the misfortune, which has happened to them with so much rigour. It is a gross mistake, when such fates are always considered as destined judgments on the desolated cities on account of their crimes, and when we contemplate as the aim of God's vengeance these unhappy persons, upon whom His justice pours all its punishments of wrath. This mode of judgment is a blameable audacity, which presumes to perspect the designs of the Divine decrees, and to interpret according to its insights.

Man is so much taken with himself, that he considers himself only as the sole object of the dispositions of the Almighty, as if these
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had no other aim, than him alone, in the regulation of the measures in the government of the world. We know that the whole complex of nature is a worthy object of the Divine Wisdom and of its dispositions. We are a part of them and would be the whole. The rules of the perfection of nature in the gross must be taken into no contemplation, and every thing must be suitable but to a just reference to us. What contributes to convenience and to pleasure in the world exists, as man figures to himself, merely on his account, and nature makes no alterations, which may be any cause of inconveniency to men, but either to chastise, to menace, or to wreak vengeance on them.

We see, however, that innumerable villains die in peace, that earthquakes, without distinction of ancient or modern inhabitants, have ever shaken certain countries, that the Christian Peru, as well as the pagan, is liable to convulsions of the earth, and that many cities, which can pretend to no preference in point of being irreprehensible, have never been subject to this devastation.

Thus is man in the dark, when he attempts to guess at the views of the Omnipotent in the government of the world. But we are in no uncertainty, when the application how we ought to use these ways of Providence conformably to his end, is concerned, Man was not born to build everlasting cottages upon this stage of vanity. Because his whole life has a far nobler aim. How beautifully do all the devastations, which the inconstancy

constancy of the world shows even in those things that appear to us the greatest and the most important, contribute to put us in mind that the goods of the earth cannot satisfy our instinct for happiness?

Far be it from me to insinuate that man is left to an immutable fate of the laws of nature without regard to his peculiar advantages. The same Supreme Wisdom, from whom the course of nature derives that accuracy, which requires no amendment, has subordinated the inferior ends to the superior, and in the very designs, in which He has made the most weighty exceptions to the universal rules of nature, in order to attain the infinitely superior ends, which are far elevated above all the means of nature, the guidance of the human species prescribes laws in the government of the world even to the course of the things of nature. When a city or a country perceives the mischief, wherewith Providence alarms them or their neighbours, Is it doubtful, what part they have to act, in order to prevent the ruin that threatens them? And are the signs, which render comprehensible the designs, to whose accomplishment all the ways of Providence agree either to invite or to instigate man, ambiguous?

A prince, who, prompted by a noble heart, is moved by these calamities of the human race to avert the miseries of war from those, whom great misfortunes over and above threaten on all sides, is a beneficent instrument in the bountiful hand of the Almighty, and a gift, which he bestoweth on the nations of
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the earth, whose value they never can estimate according to its greatness.

O shame to men! Devil with devil damn'd
Firm concord holds; men only disagree
Of creatures rational, though under hope
Of heav'nly grace: and God proclaiming peace,
Yet live in hatred, enmity and strife
Among themselves, and levy cruel wars,
Wasting the earth, each other to destroy:
As if, which might induce us to accord,
Man had not hellish foes enow besides,
That day and night for his destruction wait.

MILTON.

ON THE
VOLCANOS
IN THE MOON.

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VOLCANOS
IN THE MOON.

In the Gentleman's Magazine, 1783, there is a letter from the Russian privy counsellor Mr. Aepinus to Mr. Pallas on the account, which Mr. Magellan of the Royal Academy of Sciences in Petersburg communicated concerning a volcano in the moon, discovered by Mr. Herschel on the 4th. June of the same year. This novity was the more interesting to Mr. Aepinus, as he himself says, because in his opinion it evinced *the justness of his conjecture on the volcanic origin of the inequalities of the surface of the moon*, which he formed in the year 1778 and published in Berlin in 1781; * and wherein, as he owns with pleasure, *three naturalists* (himself Mr. Aepinus in Petersburg, professor Beccaria in Turin, and professor Lichtenberg in Göttingen,) have concurred, without communication. As attention, however, has been

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* Of the Inequality of the Moon; in the second volume of the Treatises of the Society of the friends of Natural Philosophy.

so universally directed to volcanic craters in all countries by sir William Hamilton; that conjecture may be compared to overripe fruit, which must fall into the hands of the first, who accidentally touches the tree. In fine, in order not excite a difference between contemporaries by pretensions to the honour of the first conjecture, he (Mr. A.) mentions the celebrated Robert Hooke as the first author of it, in whose *Micrography* (printed in 1655) chapter the 20th. he met with directly the same ideas. *Sic redit ad Dominum* —

Herschels discovery, as a confirmation of the ambiguous observations of Beccaria's nephew and of don Ulloa, is by all means of great value, and leads to resemblances of the moon (probably of other mundane bodies too) with our earth, which might have otherwise passed but for hazarded conjectures. But (as I take it) *Mr. Aepinus' conjecture does not confirm them*. Notwithstanding all the similitude of the circular spots of the moon to craters of volcanos, there remains a material difference between both, and on the contrary a so striking resemblance of them to other circular features of *nonvolcanic mountains* or ridges of hills upon our earth shows itself, that rather another conjecture, though but in some measure analogical with that, on the formation of the mundane bodies might thereby be confirmed.

The circular elevations in the moon similar to craters by all means make an origin by *eruptions* probable. But we find upon our earth two sorts of circular elevations: of which

which the one is but of so small a compass, that it, observed from the moon, could not be distinguished by any telescope whatever, and the substances, of which these consist, show their origin from volcanic eruptions. Other sorts, on the contrary, comprise whole countries or provinces of many hundred square miles, within a ridge of hills beset with more or less high mountains and of a circular form. These only might be seen from the moon, and indeed of the same size, as we discern those circular spots in the moon, unless the similarity of their clothing (by forests or other productions of the ground) should impede the distinguishing of them at so great a distance. These allow a presumption of *eruptions*, from which they may have taken their origin, but which according to the testimony of the substances, of which they consist, can have been by no means volcanic. — The crater of Vesuvius has (according to della Torre) in its highest circumference 5624 Parisian feet, and therefore about 500 Rhineland-roods, and in diameter nearly 160; but such a one could certainly not be discovered in the moon by any telescope.* Whereas the spot in the moon

K 2

Tycho,

* But its fiery eruption might be seen in the moon's night. In the above-mentioned letters the remark is made to the observations of Beccaria's nephew and of don Ulloa, that both volcanos must have been of an astonishing compass, as Herschel was the only one among all the spectators who could just observe his volcano by a telescope beyond comparison greater. But with regard to self-luminous substances, it does not depend so much on the compass as on the purity of the fire, in order to be distinctly seen; and it is known of volcanos, that their flames spread around them a light sometimes clear, sometimes stifled in smoke. —

Tycho, similar to a crater, has nearly thirty german miles in diameter, and might be compared to the kingdom of Bohemia, but the spot Klavius, near it, in size to the margravate of Moravia. Now these countries upon the earth are likewise similar to craters enshaded with mountains, from which, in the same manner as from Tycho, chains of mountains extend themselves in the form of a star. But if our basins of the shape of craters, inclosed by ridges of mountains, (which form reservoirs of water for the rivers, and with which the earth is every where covered) should not yield the moon a similar aspect — as in fact it is to be presumed but by a few things —, this would be to be ascribed but to the contingent circumstance, That the atmosphere of the moon (whose actuality is proved by Herschels discovery, as fire burns there) cannot reach so high by far as ours (as the imperceptible refraction at the edge of this satellite evinces), therefore the ridges of mountains of the moon reach beyond the sphere of vegetation; whereas with us the ridges of mountains are for the most part covered with vegetable productions, and hence cannot predominate greatly over the surface of the inclosed basin.

We have upon the earth likewise two sorts of formations of the surface of the ground similar to craters: the one, which is of volcanic origin, and which is 160 roods in diameter, consequently comprises about 20000 square roods; the other, which is by no means of volcanic origin, and has about 1000 square miles, therefore 200000 times more in its surface-

face-contents. To what shall we now compare those circular elevations in the moon (of which none of those that have been observed have less than a german mile, some thirty german miles, in diameter)? — In my opinion, to judge according to analogy, only to the latter, which are not volcanic. For the form only does not decide; the immense difference of the size must also be taken into the account. Then, however, Herschel's observation confirms, it is true, the idea of volcanos in the moon, but only of such ones, whose craters neither have been nor can be seen by him or any body else; but it has not confirmed the opinion that the visible circular configurations upon the surface of the moon are volcanic craters. For, if one may judge here according to the analogy with similar great basins upon the earth, in all probability they are not. It would then need to be said, only, that, as the moon, with regard to the basins resembling craters, has so much likeness to those, which form the reservoirs of water upon the earth for the rivers, but are not volcanic, it may be presumed that she is formed in a similar manner to the volcanic craters found upon the earth. Indeed we cannot see the latter in the moon; but there may be perceived in the moon's night self-luminous points which, as proofs of a fire upon the moon, may be the best explained from this cause which may be presumed according to analogy.*

- K 3

Setting

* Beccaria held the ridges running like rays out of the circular elevations of the moon rivers of lava; but the prodigious

Setting aside now this small ambiguity in the consequence of the aforementioned celebrated men, — to what cause then can be ascribed the nonvolcanic craters so universally to be met with upon the surface of the earth? Here eruptions must naturally be laid as a foundation; but volcanic they cannot be, because the mountains, which form their edge, contain no substances of such a nature, but appear to have originated from an aqueous mixture. I think, that, when the earth is represented as a chaos originally dissolved in water; the first eruptions, which must every where take place, even from the greatest depths, have been (in the proper sense of the word) *atmospherical*. For it may be very well assumed that our sea of air (aerosphere), which is at present above the surface of the earth, was formerly mixed in a chaos with the other material substances of the mundane mass; that it, together with many other elastic *vapours*, has broken out from the heated globe in a manner in great bladders; has in this ebullition (from which no part of the surface of the earth was free) thrown out in the form of craters the substances, which form the original mountains; and thereby has laid the foundation for all the beds of the rivers, with which, like the meshes of a net, the whole land is interwoven.

prodigious difference between them and those, which flow from the volcanos of our earth, relative to their magnitude, refutes this opinion, and makes it probable That they are chains of mountains which, like those upon our earth, proceed in the manner of *radii* from a principal stock of mountains.

terwoven. Those edges, as they consist of matter, which was softened in the water, must gradually quit the water that dissolved them, which water in running off washed out the cuts, whereby those edges, at present mountainous and in the form of saws, are distinguished from the volcanic ones, which represent a continuous ridge. These primeval mountains, after other substances, which did not crystallize or harden so soon, for instance, hornstone and original chalk, were separated, consist of *granite*, upon which, as the ebullition was always weaker, consequently lower at the same place, the latter, as washed-out substances, settled in an order like steps, according to their less gravity or capacity of solution in water. Thus the first plastic cause of the inequalities of the surface was an atmospherical ebullition, but which I would rather name *chaotic*, in order to denote its first beginning. Upon these, it must be represented, a *pelagian* alluvion couched by little and little substances, which for the most part contained marine creatures. For those chaotic craters, where a multitude of them was in a manner grouped, formed widely extended elevations above other regions, where the ebullition was not so violent. From those there was land with its mountains, from these the bed of the sea. As the superfluous crystallization's water slipped from the edges of those basins, and one basin let its water run off into another, but all of them to the low part of the surface of the earth just forming itself (namely, the sea); it formed the

passages for the future rivers, that one still beholds with admiration pass between steep walls of rocks, on which they can at present gain nothing, and seek the sea. This was therefore the figure of the skeleton of the surface of the earth, so far as it consists of granite that continues under all the horizontal layers, which the subsequent *pelagian* alluvions placed upon that. But the figure of the countries, even where the new strata quite covered the old granite at the bottom, must assume the form of craters, because their bed was so formed. Hence may be drawn upon a map (upon which no mountains are marked) the ridges of hills, when through the sources of the streams that fall into a great river a continual line, which always encloses a circle as the basin of the river, is drawn.

As the bed of the sea perhaps constantly deepened and drew to itself all the water running out of the above-mentioned basins; so the beds of the rivers and the whole present structure of the land, which makes possible the union of the waters from so many basins in one channel, were produced. For there is nothing more natural, than that the bed, wherein at present a river carries off the water from great countries, was formed by the very same water, to which it now leads, namely, the sea and its very ancient alluvions. By an universal ocean, as Buffon would have it, a washing-away according to such a rule cannot possibly be conceived; because under the water no flowing according to the declivity of the ground, which however constitutes

constitutes here the most essential part, is possible.*

The *volcanic eruptions* appear to have been the latest, and not till the earth grew firm on its surface. They did not form the land, with its hydraulic regular architecture, for the purpose of the flowing of rivers, but perhaps single mountains only which, in comparison of the edifice of the whole *terra firma* and its mountains, are but a trifle.

The use then, which the thought of the aforementioned celebrated men may be of, and which Herschel's discovery confirms, though but indirectly, is with regard to cosmogony of importance; to wit, that the mundane bodies have received their first formation pretty much in a similar manner. In the beginning they were all in a fluid state; this is proved by their globosity and, where they can be observed, also, according to the rotation upon the axis and the gravity on their surface, flatted form. Without heat however there is no fluidity. *Whence came this original heat?* To derive it with Buffon from the heat of the sun, of which all the planetary globes are but broken-off pieces, is but a shift for a short time; for *whence came the heat of the sun?*

K 5

* The course of rivers seems to me to be the proper key to the theory of the earth. For thereto is required, in the first place, that the country be divided by ridges of hills, as it were, into ponds: secondly, that the ground, upon which these ponds communicate to one another their water, in order to carry it off at last in one canal, shall be formed and built by the water itself, which falls by degrees from the highest basins to the lowest bason, the sea.

sun? * When it is supposed (which from other grounds is very probable) that the element of all the mundane bodies in the whole extended space, in which they at present move, was at first diffused in the form of vapour, and that they formed themselves therefrom according to laws, at first of the chymical, but at last, and chiefly, of the cosmological, attraction; Crawford's discoveries give a hint, together with the formation of the mundane bodies

* The sun, which is 14,00000 times greater than the earth, is, according to the latest, highly probable, opinion, not an igneous but an electric globe, whose light is produced by the friction of its incredibly quick gyration. Its body, according to Bode's representation, is an originally planetary opaque body involved in light (*Lichtmaterie*), which streams around it like an atmosphere of fire (photosphere) and has sometimes empty places, through which we see the proper body, and which appear to us as spots upon the sun's disk. The Sun's rotation about his axis is, in comparison of his magnitude with that of his planets, performed with greater velocity than any of them. The much smaller earth turns round in 24 hours, but the huge body of the sun in 25 days 14 hours; only Jupiter, who revolves in 9 hours 56 minutes, and is 1470 times bigger than the earth, comes near to that rotation. The luminous substance (*lumière*), which, according to Bode's opinion, surrounds the real body of the sun, in itself opaque, is no true burning, but only light, whose *nonigneous* rays propagate themselves through the ether, but first according to the size of the angle of incidence in the (planetary) atmosphere happening in every country (of the planets), with their astonishing quick motion according to the nature of the soil there and of the vapours rising out of the earth (and other planets), by different modifications and mixtures of its mineral, vegetable and animal primitive matter, then produce and occasion upon the surface of the earth more or less heat. — *Calorique*, therefore, lies by all means in the rays of the sun; but it develops itself first out of them, when they dart against any thing more rigid. Every body knows that it is cold upon high mountains though the sun shines upon them. Hence every planet has the modification of its density; but the light of the sun is strengthened in the distant planets by the moon.

bodies to render comprehensible at the same time the generation of as great a heat, as one pleases. For, if the element of heat is of itself uniformly spread every where in the mundane space, but adheres to different substances in the proportion only as they attract it differently; if, as he proves, diffused substances in the form of exhalations contain much more elementary heat in themselves, and also require more to a diffusion in form of vapour, than they can keep, as soon as they pass to the state of denser masses, that is, unite themselves in mundane globes: these globes must contain a proportion of warm matter above the natural equipoise with the warm substance in the space, in which they are; that is, their relative heat with respect to the mundane space is augmented. (Thus the vitriolic acid air, when it touches ice, loses at once its state of being in vapour, and thereby the heat increases to such a degree, that the ice melts in a moment). We cannot discover how great the augmentation may be; yet the measure of the original rarefaction, the degree of the condensation afterwards, and the shortness of the time of it, seem here to come into computation. As the latter depends upon the degree of attraction, which united the diffused matter, but this upon the quantity of the substance of the mundane body forming itself; so the greatness of the heat too must be proportional to the latter. In this manner do we perspect, why the central body (as the greatest mass in every mundane system) can

can have the greatest heat, and also be a sun; as also presume, with some probability, that the higher planets, as they are partly greater, and partly formed of more rarefied matter, than the lower, may have more internal heat than these, which they (as they receive from the sun nearly but light enough for seeing) seem to require. Also the mountainous formation of the surfaces of the mundane bodies, to which our observation reaches, of the earth, of the moon, and of venus, from atmospherical eruptions of their originally heated, chaotic, fluid mass, appear to us as a pretty general law. Finally the volcanic eruptions upon the earth, the moon, and even the sun (whose craters Wilson saw in its spots, by ingeniously comparing their phenomena with one another, as Huygens did those of Saturn's ring), receive an universal principle of derivation and illustration.

Should one retort against me here the fault, which I found above with Buffon's mode of exposition, and ask, Whence then came the first motion of those atoms in the mundane space? I would answer, That I did not thereby engage to point out the first of all the alterations of nature, which in fact is impossible. But yet I hold it not allowable to stop at a quality of nature, for example, the heat of the sun, which has a resemblance to phenomena, whose cause we may at least conjecture according to known laws; and in a desperate manner to call in the immediate Divine disposition as a ground of explanation. This must indeed, when nature on the whole

is

is in question, inevitably close our inquiry; but, in every epoch of nature, since none of these epochs can be given as the absolutely first in a sensible world, we are not freed from the obligation to search among the causes of the world, as far as it is but possible for us, and to follow their chain according to laws known to us, as long as its links are connected.

...question, inevitably close our inquiries
...in every epoch of nature, since none of
these epochs can be so as the absolutely
...in a remaining world, we are the first from
...collaboration to nature, more the cause of
...world, as we are it is but possible for us
...to follow their chain according to laws
...to us, as long as it takes us con-

OF A
GENTLETON
LATELY ASSUMED IN PHILOSOPHY.

OF A

GENERAL

NOTION
RECENTLY ASSUMED IN PHILOSOPHY.

OF A
G E N T L E T O N
L A T E L Y A S S U M E D I N P H I L O S O P H Y .

The name of philosophy, after it had quitted its first signification, A scientific wisdom of life, came very early into vogue as a title of the ornament of the understanding of no common thinkers, for whom it now represented a mode of unfolding a mystery. — The *Ascetics* in the Macarian deserts termed their *monkdom* (if I may be allowed this word,) philosophy. The *Alchymist* named himself *philosophus per ignem*. The *lodges* in ancient and more modern times are adepts of a mystery through tradition (*philosophus per initiationem*), of which out of ill-will they will disclose nothing to us. In fine, the latest possessors of it are those who have it in themselves, but unfortunately cannot disclose and communicate it universally by language (*philosophus per inspirationem*). If there were a cognition of the supersensible (which only, in a theoretical view, is a true mystery), to reveal which in a practical view is by all means possible for the human understanding;

yet such a cognition from it, as a faculty of cognition by *conceptions*, would be far inferior to that which as a faculty of *intuition* could be immediately perceived by the understanding: for the discursive understanding must by means of the former bestow much labour on the resolution and composition of its conceptions according to principles, and ascend many steps with difficulty, in order to make progress in cognition, instead of which an *intellectual intuition* would conceive and exhibit the object immediately and at once. — He, who imagines himself to be in the possession of the latter, looks down with contempt upon the former; and, conversely, the conveniency of such a use of reason is a strong seducement boldly to assume such a faculty of intuition, as also highly to recommend a philosophy grounded thereupon: which may be easily explained from the natural selfish propensity of men that reason tacitly indulges.

It lies not only in the natural laziness, but in the vanity of man (a liberty misunderstood), that those, who *have enough to live upon*, whether opulently or penuriously, in comparison of those who must work in order to live, hold themselves *gentle*. — The *Arabian*, or the *Mongol*, despises the townsman and, as wandering in the wilds with his horses and sheep is more a pleasure than a labour, thinks himself a gentleman in comparison of him. The *Waldtuguse* is of opinion to imprecate his brother, when he says, I wish you may be obliged to breed your cattle yourself like the *Buraete*! He increases the imprecation, and

and says, I wish you may be under the necessity of cultivating the ground like the *Russian*! The latter, according to his way of thinking, perhaps would say, I wish you may be obliged to sit at the loom, like the *German*! — In a word, All think themselves gentle in proportion as they believe not to have occasion to work; and according to this principle it has been lately brought to such a pass, that a pretended philosophy freely and publicly announces itself, at which one needs not *work*, but only hearken to the oracle in *one's self* and enjoy, in order to bring thoroughly into his possession all wisdom, by which is meant philosophy: and this in a *ton*, which shows that the devotees of this philosophy do not intend to put themselves on a footing with those who — *scholastically* — hold themselves bound to proceed slowly and circumspectly from the critic of their cognoscitive faculty to the dogmatical cognition, but — *in the manner of geniuses* — by a single penetrating view of their interior are able to perform all that diligence can, and still more. Many, with regard to sciences that require labour, as the mathematics, natural philosophy, ancient history, knowledge of languages &c., even with regard to philosophy, provided they be obliged to engage in a methodical unfolding and a systematical composition of conceptions, may behave in a proud pedantic manner; but to assume a *gentle ton* or to affect the air of a man of quality, can enter into the mind of none, but the philosopher of *intuition*, who does not by the

herculean labour of self-cognition demonstrate himself from below upwards, but, as it were, over-flying it, by an apotheosis that costs him nothing, from above downwards: as he there speaks from his own credit, and is therefore bound to be answerable to nobody.

And now to the point itself!

PLATO, an equally good mathematician and philosopher, admired in the properties of certain geometrical figures, for instance, a circle, a sort of *conformity-to-end*, that is, a fitness for the resolving of a variety of problems, or a variety of the solution of the same problem (as in the doctrine of geometrical places) from one principle, as if the requisites to the construction of certain conceptions of quantities were placed in it, though they may be perspected and proved *à priori* as necessary. Conformity-to-end, however, is cogitable but by the reference of the object to an understanding, as the cause.

As with our understanding, as a cognoscitive faculty *by conceptions*, we cannot extend the cognition beyond our conception *à priori* (which however actually takes place in the mathematics); so Plato was under the necessity of assuming for us men intuitions *à priori*, but which had not their first *origin* in our understanding (for our understanding is not an intuitive, but only a discursive, or thinking faculty), but in such a one as is at the same time the first ground of all things, that is, the Divine understanding, which intuitions then merit to be named *directly* archetypes (ideas). But our intuition of these divine ideas (for

(for an intuition *à priori* we must needs have, if we would render comprehensible to ourselves the faculty of synthetical propositions *à priori* in the pure mathematics) is distributed to us but *indirectly*, as the copies (*ectypa*), in a manner the shadows (*die Schattenbilder*) of all things that we cognise *à priori* synthetically, with our birth, but which is at the same time attended with an offuscation of these ideas, by the oblivion of their origin; as a consequence of which our spirit (now denominated soul) has entered into a body, gradually to shake off whose fetters must at present be the noble business of philosophy.*

* But we must not forget PYTHAGORAS, of whom indeed we know too little to make out

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any

* Plato proceeds in all these conclusions consequentially at least. No doubt the question, which has been but lately distinctly expressed, occurred to him, though but in an obscure manner. How are synthetic positions *à priori* possible? Had he then been able to divine what has been first found in later times: That there are by all means *intuitions à priori*, but not of human understanding, but sensible (under the name of space and of time), that therefore all objects of the senses are for us as phenomena merely, and even their forms, which we can determine *à priori* in the mathematics, not those of the things in themselves, but (subjective) of our sensitiveness, which are therefore valid for all objects of possible experience, but not a single step farther; he would not have sought the pure intuition (which he stood in need of to render comprehensible to himself the synthetical cognition *à priori*) in the Divine understanding and its archetypes of all beings, as self-sufficient objects, and thus have kindled the torch of fanaticism. — For he perspected full well that, if in the intuition upon which geometry is bottomed he should maintain to be able to intuit *empirically* the object in itself, the geometrical judgment and the whole mathematics would be a science of experience merely; which is inconsistent with the *necessity*, that (together with the intuitiveness) is directly what secures to them so high a rank among all sciences.

anything certain concerning the principle of his philosophy. — As the wonders of *figures* (of geometry) awoke the attention of Plato, so the wonders of numbers (of arithmetic), that is, the appearance of a certain conformity-to-end, and a fitness, in a manner intentionally laid in the quality of them, for resolving many problems of reason of the mathematics, where intuition *à priori* (space and time) and not merely a discursive cogitation must be presupposed, awoke that of Pythagoras, as to a species of *magic*, only in order to render comprehensible to himself the possibility, not only of the enlarging of our conceptions of quantities in general, but of their peculiar properties, as it were, rich in secrets. — History says that the discovery of the relation of numbers among the tones, and of the law according to which only they constitute music, suggested to him the thought, that, as in this play of sensations the mathematics (as a science of numbers) contain equally the principle of its form (and indeed, as it seems, *à priori*, on account of its necessity), an intuition, though but obscure, of a nature, which is ordered according to equations of numbers by an understanding ruling over it, is inherent in us; which idea then, applied to the celestial bodies, produced the doctrine of the harmony of the spheres. Now, nothing animates the senses more than music; but the animating principle in man is the *soul*; and as music, according to Pythagoras, rests upon perceived relations of numbers merely, and (which is to be well noticed) that animating principle

principle in man, the soul, is at the same time a free being determining itself; so his definition of it, *Anima est numerus se ipsum movens*, may perhaps be rendered intelligible and justified; when it is supposed, that by this faculty to move itself, he intended to point out its distinction from matter, as it in itself is inanimate, and moveable but by something external, consequently liberty.

It was then the *mathematics*, on which Pythagoras as well as Plato philosophised, by numbering to the intellectual all cognition *a priori* (whether it contained intuition or conception), and believed by this philosophy to fall upon a *secret*, where there is none: not because reason can answer all the questions proposed to it, but because its oracle grows mute, when the question soars so high, that it has no longer any signification. When, for instance, geometry displays a few properties of the circle named beautiful (as may be seen in Montucla), and it is inquired, Whence does it acquire these properties, which seem to contain a sort of extensive utility and conformity-to-end? no other answer can be given than, *Quaeritur delirus quod non respondet Homerus*. He who would resolve philosophically a mathematical problem, contradicts himself; for example, What is the reason that the *rational* relation of the three sides of a rectangular triangle can be but that of the numbers 3, 4, 5? But he who philosophises on a mathematical problem believes here to fall upon a secret, and on that account to see something exceedingly great, where he

sees nothing; and directly places genuine philosophy (*philosophia arcana*) in brooding over an idea in himself, which he can neither render intelligible to himself, nor communicate to others, where then the poetic talent finds nourishment for itself to riot in feeling and enjoyment: which indeed is far more inviting and glittering, than the law of reason, to acquire a possession for one's self by labour; — whereby however poverty and fastuousness yield the ridiculous phenomenon, to hear philosophy speak in a *gentle tone*.

The philosophy of ARISTOTLE, on the other hand, is labour. But I consider him here (like the two former) as a metaphysician only; that is, a dissector of all cognitions *a priori* into their elements, and as an artificer of reason to compose them again from those elements (the categories); whose elaboration, so far as it reaches, has preserved its usefulness, though indeed in *advancing* it did not succeed in extending the same principles that are valid in the sensible (without his observing the dangerous leap which he had to take here) to the supersensible, whither his categories do not reach: where it was necessary previously to divide and to measure the organ of thinking in himself [reason] according to its two fields, the theoretical, and the practical, but which labour was reserved for later times.*

However,

* This was the most difficult problem of metaphysic, and of course to be resolved the last; but whose solution promised immortality to whomever should succeed in it. Aristotle's view of the categories was very confined.

His

However, we shall now listen to and estimate the new *ton* (which has rendered philosophy unnecessary) in philosophising.

When men of quality philosophise, should it be to the very summit of metaphysic, it must redound to their greatest honour, and they merit indulgence in their (almost inevitable) fault against the school, because they let themselves down to its level on the footing of civil equality.*

L 5

But

His categories are nothing but an enumeration or a trivial arrangement of mere predicates. Whereas Kant went much deeper, and presented the categories under a very different aspect, namely, as original modes of representation, or as the original procedure or manifestations of intellect, nay, as the dissections of the very understanding itself. But, as this subject is fully treated in THE PRINCIPLES OF THE CRITICAL PHILOSOPHY, the translator needs not dwell on it. When the reader shall have taken as much pains to penetrate this subtile matter, when he shall have received as much pleasure and instruction from this sublime science, as the translator has done, and when he shall have sufficiently reflected on the weighty consequences of this nice and accurate anatomy of the human mind in Kant's transcendental deduction of the categories, he will not be apt to accuse the translator of either exaggeration or enthusiasm; when he gives it as his opinion, That KANT is the *only* founder of all true philosophy and the greatest mental anatomist that ever lived.

* There is however a difference between philosophising, and affecting the philosopher. The latter takes place in a gentle *ton*, when the despotism over the reason of the people (nay, even over one's own) by fettering in a blind belief is given out for philosophy. Thereto belongs, for instance, the belief in the thunder-legion in the age of Marcus Aurelius, as also in the fire broken out by a miracle from under the rubbish of Jerusalem for a trick to the apostate Julian; which was given out for genuine philosophy, and the contrary to it is named, the collier's unbelief (just as if the colliers, in the bottoms of their pits, were cried down for being very unbelieving with regard to the tales that are carried to them): to which
the

But those willing to be philosophers can by no means be excused when they assume the airs

the assurance that philosophy was perfectionated two thousand years ago is superadded, because 'the Stagyrte did so much for the science,' that he left little or nothing of any consequence for his followers to explore.' So the levellers of the political constitution are not only those who, according to Rousseau, are willing that the citizens of state shall be all equal because every one is *every thing*; but those, who are willing that all shall be equal, because all of them, one excepted, are nothing, and are monarchists out of envy: who elevate to the throne sometimes Plato, sometimes Aristotle, in order, as they are conscious of their own incapacity to think for themselves, not to suffer the odious comparison with other contemporaries. And thus the man of quality affects (chiefly by the latter judgment) the philosopher by putting an end to all further philosophising by obscuring. — This phenomenon cannot be better exhibited in its proper light than by Voss' Fable, a poem which is worth a hecatomb. — And which the translator presents here to the reader in the original German:

Der Kauz und der Adler.

Keine Fabel.

Ein Kauz, in düstern Synagogen
Des Ober-Uhus auferzogen,
Kam früh in grauer Dämmerung
Zum König Adler hergeflogen.

Treu, krächzt' er, tren der Huldigung,
Rüg ich den gellenden Trompeter
Der unglücksschwangern Aufklärung,
Den Hahn, Dir König, als Verräther.
Wenn sanft Dein wohlbeherrschter Staat
Noch schläft und träumet und verdauet,
Und unser Lied, was wacht, erbauet;
Schnell kräht uns der Illuminat
Die Sonn' empor, um aufzuklären,
Und Ruh und Andacht uns zu stören,
Fink, Lerche, Schwalb' und Meis' empören
Gefild' und Wald in freien Chören;
Man kann sein eigen Wort nicht hören.
Die tolle Rotte singt gar Hohn
Der mystischen Religion
Die wir in heil'gem Dunkel lehren:

Und,

airs of men of fashion, because they raise themselves up above the *members of their fraternity*, and violate their unalienable right to liberty and equality in affairs of mere reason.

The principle, to be willing to philosophise by the influence of a higher *feeling*, is of all the best calculated for the gentle *ton*; for who will dispute my feeling with me? If I can make to be believed that this feeling is not merely subjective [*in me*], but may be required of every body, consequently is valid objectively, and as a part of cognition, therefore not merely reasoned, as a conception, but, as an intuition (an apprehension of the object itself); I have the greatest advantage over all those who must first justify themselves, in order to be able to boast of the truth of their assertions. Hence I may speak in the tone of a commander, who is freed from the trouble to prove the title of his possession (*beati possidentes*). — *Vive la philosophie* from feeling, which leads us directly to the point itself! Away with the reasoning from conceptions, which essays it but by the roundabout manner of universal criteria, and which, before it has matter that it can immediately lay hold of,

Und, König, strafst Du nicht, so drohn
Aufruhr und Hochverrath dem Thron!
Herr König, laß Dir doch gefallen
(Wir Kauz' und Eulen flehn gesammt):
Den Hahn und seiner Schreier'n allen
Zum Bändiger, im Censoramt
Den frommen Uhu zu bestallen!

Der Adler that als hört' er nicht,
Und sah ins junge Morgenlicht.

of, previously requires determinate forms which it can lay as a foundation to that matter! And suppose reason cannot at all explain itself any farther concerning the rightfulness of the acquisition of these its high introspections, it remains nevertheless a fact, 'That philosophy has its secrets which may be felt.'* The

* A celebrated possessor** of these expresses himself on this head thus: 'As long as reason, as lawgiver of the will, must say to the phenomena (the free actions of men are here understood), *thou pleasesst me, thou dost not please me*; so long must it consider the phenomena as effects of realities; whence he then infers that its legislation requires not only a form, but matter (stuff, an end) as a determinative of the will, *id est*, a feeling of pleasure (or displeasure) must precede as an object, if reason shall be practical. — This error, which, if it were allowed to slip in, would destroy all moral, and leave nothing behind but the maxim of felicity, which can have no objective principle whatever (because it is different according to the difference of the subjects), can be brought to light by means of the following touchstone of feeling only. That pleasure (or displeasure), which, in order that the fact may happen, must necessarily precede the law, is pathological; but that which, in order that the fact may happen, the law must necessarily precede, is moral. That has at bottom empirical principles (the matter of the arbitrement); this a pure principle *a priori* (in which the form of the determination of the will only is concerned). — In this the sophism (*fallacia causae non causae*) may be easily detected, as the Eudemonist pretends that the pleasure (contentment) which an honest man has in view, in order to feel it one time or other in the consciousness of his well spent life, (consequently the prospect of his future happiness) is the proper spring of his leading a good life (conformably to the law). For, as I must previously suppose him to be honest or upright and obedient to the law, that is, one with whom the law precedes the pleasure, in order afterwards to feel a mental pleasure in the consciousness of his well spent life; so it is an empty circle in inferring, to make the

** The translator thinks Schlosser the poet is here meant; who would need to be a better poet, than he is a philosopher, otherwise the translator cannot see in what his celebrity consists.

The case of this pretended sensibleness of an object, which cannot be met with but in pure reason, is as follows. — Hitherto, only three steps of holding-true to its vanishing in total ignorance were heard of: knowing, believing, and opining.*

At

latter, which is a *conséquence*, the cause of that course of life.

But as to the *syncretism* of a few moralists: to make the *eudaemony*, though not wholly, at least in part, the objective principle of morality (though it were granted, that that has in an unobserved manner influence subjectively on the determination of the will of men which harmonizes with duty); is the straight way to be without all principle. For the springs, borrowed from felicity, mingling themselves therewith, though they indeed tend to the very same actions as those which flow from pure moral principles, contaminate and weaken at the same time the moral mind-*edness*, whose value and high rank just consist in being obedient to nothing but the law.

* The middle word is sometimes used in a theoretical sense as synonymous with that to hold something *probable*; and it must be well noticed, that of what lies beyond all possible bounds of experience, it cannot be said that it is either *probable*, or *improbable*, by consequence the word belief with regard to such an object in a *theoretical* *signification* finds by no means place. — By the expression, this or that is *probable*, is understood a medium (of holding-true) between opining and knowing; and it has the fate of all mediums, that any thing may be made of it one pleases. — But, for example, if any one should say, It is at least *probable* that the soul lives after the body, he knows not what he means. For *probable* signifies that which, held-true, has on its side more than the half of the truth (of the sufficient reason). The grounds therefore must altogether contain a partial knowing, a part of the cognition of the object on which is judged. If now the object is no object at all of a cognition possible for us (such as is the nature of the soul, as a living substance even without the conjunction with a body, that is, a spirit), on its possibility neither probability nor improbability, but nothing whatsoever can be judged. For the pretended grounds of cognition are in a series, which by no means approaches the sufficient reason. consequently the

At present a new step, which has nothing at all in common with logic, and which is no

the cognition, as they are referred to something supersensible, of which, as such, no theoretical cognition is possible.

The belief in a *testimony* of another,¹ that regards something supersensible, is of the very same nature. The holding-true of a witness is always something empirical; and the person whose testimony I am to believe must be an object of experience. But if he is assumed as a supersensible being; I can learn by no experience his existence itself, therefore that it is such a being that testifies this to me (because that is inconsistent), also not to conclude it from the subjective impossibility of being able to explain to myself the phenomenon of an internal call made upon me otherwise than by a supernatural influence (in consequence of what has just been said of the judgment according to probability). Therefore there is no theoretical belief in the supersensible.

But in a practical (morally practical) signification a belief in the supersensible is not only possible, but it is even inseparably conjoined with it. For the sum of morality in me, though supersensible, of course not empirical, is given (by a categorical imperative) with a truth and an authority not to be mistaken, but which commands an end that, theoretically contemplated, without a potency of a ruler of the world co-operating, is by my powers alone impracticable (the chief good). But to *believe* in it morally practically, does not mean previously to assume theoretically as true its reality, in order to acquire enlightening to understand and springs to effectuate that commanded end: for the law of reason is already of itself thereto objectively sufficient; but in order so to act according to the ideal of that end, as if such a government of the world were possible: because that imperative (which does not command believing but acting) contains on the side of man obedience and subjection of his *arbitrement* to the law, but on the side of the *will* commanding him an end at the same time a faculty (that is not the human) suitable to the end, for whose behoof the human reason can, it is true, command the actions, but not the consequence of the actions (the attainment of the end), as it is neither always, nor wholly, in the power of man. Therefore in the categorical imperative of practical reason according to the matter, which says to man, I will that thy actions shall harmonize with the scope of all things, the presupposition of a legislative will

no progression of the understanding, but a presension (*praevisio sensitiva*) of that which is no object whatever of the senses, *id est*, a *presentiment* of the supersensible, is added.

It is evident now, that in this there is a certain mystical *tact*, an overleap (*salto mortale*) from conceptions to the incogitable; a faculty to seize that which no conception reaches, an expectation of mysteries, or rather an amusing with fair hopes of such, but correctly speaking a bent towards fanaticism. For presension is dark expectancy, and contains the hope of an unfolding, but which in problems of reason is possible by conceptions only, therefore as it is transcendent and can lead to no proper *cognition* of the object, a surrogate of it, supernatural communication (mystical illumination); must be promised; which is then the death of all philosophy.

Plato the *academist* was then, though without his fault (for he used his intellectual intuitions but regressively, for the *explaining* of the possibility of a synthetical cognition *à priori*, not progressively, in order to *extend* it by those ideas legible in the divine understanding), the father of all the fanaticism *with philosophy*. — But I would not willingly confound Plato the *letter-writer* (lately translated into German) with him. He, besides 'the four things belonging to cognition, the name of the object, the *description*, the *exhibition*, and the

will that comprises all power (the Divine will) is at the same time thought, and does not require to be particularly obtruded.

the *science*, would yet have 'a *fifth*' (wheel to the cart), namely, 'the object itself and its *true entity*.' — 'This invariable being, that can be intuited but in the soul and by the soul, but in it, as by a leaping spark of fire, kindles a light of itself, he (as an *exalted* philosopher) pretends to have caught; of which one cannot however speak, (because one would be directly convinced of his ignorance) at least to the people: as every essay of this sort would be dangerous, partly by these sublime truths being exposed to a coarse contempt, partly (that which is the most rational here) by the soul's being strained by vain hopes and an idle fancy of the knowledge of great mysteries.'

Who does not see here the mystagogue, who not only extravagates alone, but is at the same time a clubbist, and while he speaks to his adepts, in contradistinction to the people (by whom are understood all those not initiated), assumes an air of superiority with his pretended philosophy! — Allow me to adduce a few more recent examples of this.

In the modern mystical platonic language it is said, 'All philosophy of men can show nothing but the aurora; the sun must be had a presension of.' But nobody can have a presension of a sun, unless he has already seen one; for it might happen, that on our globe day should regularly follow (as in the Mosaic history of the creation), without ever being able, on account of the constantly over-cast heaven, to see a sun, and yet all affairs continue their usual course according to this
vicissi-

vicissitude (of day and night and of the seasons). In such a state of things however a true philosopher would not have a *presension* of a sun (for that is not his business), but he might perhaps *guess* at it, in order, by adopting an hypothesis of such a heavenly body, to explain that phenomenon, and even hit it as happily. — Indeed to look into the sun [the supersensible], without growing blind, is impossible; but to see it in the reflex (of reason morally illumining the soul), and even sufficient in a practical view, as the elder Plato did, is very feasible; whereas the new Platonists ‘certainly give us nothing but a playhouse sun,’ as they wish to deceive us by feelings (*pressentiments*), that is, merely what is subjective, which gives no conception at all of the object, in order to amuse us with the fancy of a knowledge of the objective, which is founded upon the transcendent. — In such typical expressions, which are to render that presension intelligible, the platonising philosopher by feeling is inexhaustible, for instance, ‘to approach so near to the goddess Wisdom, as to hear the rustling of her garment;’ but in praise of the *false Plato*, ‘as he cannot lift up Isis’ veil, to make it so thin, that one may have a *pressentiment* of the goddess under it.’ How thin, is not mentioned here; probably so thick, however, that any thing may be made of the phantom one pleases; for else it would be a seeing, which ought by all means to be avoided.

For the same behoof, ‘analogies, probabilities’ (which have been already spoken of

Vol. II.

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above),

above), and 'danger of emasculation of reason, whose nerves are grown so delicate by metaphysical* sublimation, that it would hardly hold

* What the new Platonist has hitherto said, is, as to the treatment of his theme, nothing but *metaphysic*; and can therefore concern the formal principles of reason only. But it insensibly involves a *hyperphysic* also, that is, not principles of practical reason; but a theory of the *nature* of the supersensible (God, the human soul), and will 'not have this so *very fine*' spun. But how a philosophy, which here concerns the matter (the object) of the pure conceptions of reason, when it (as in transcendental theology) is not carefully separated from all empirical threads, is *nothing at all*, may be explained by the following example.

The transcendental conception of God, as the *most real Being*, cannot, abstract as it is, be avoided in philosophy; for it belongs to the band and at the same time to the purifying of all the concrete that may afterwards come into the applied theology and doctrine of religion. The question is now, Shall I conceive God as the *complex* or *aggregate* of all realities, or as the chief *ground* of them? If I do the former, I must adduce examples of this matter, of which I compose the Supreme Being, in order that his conception may not be void and without meaning. I therefore attribute to him perhaps an *understanding*, or even a *will*, and such like, as realities. But an understanding, which I know, is a faculty of *thinking*, that is, a discursive faculty of representation, or such a one, as is possible by a criterion that is common to several things (from whose difference I must therefore abstract in *thinking*) consequently not without *limitation* of the subject. Therefore a *Divine* understanding is not to be assumed as a faculty of thinking. But I have not the smallest conception of another understanding, which is a faculty of intuition; consequently the conception of an understanding, which I ascribe to the Supreme Being, is totally void of sense. — In like manner, when I place in him another reality, a *will*, by which he is the cause of all things without him, I must assume such a one by which his contentment (*acquiescentia*) does not absolutely depend upon the existence of the things without him; for that were limitation (*negatio*). Now I have not the smallest conception; and cannot give an example of a will, by which the subject does not ground his contentment upon the succeeding of his volition, which therefore does not depend upon the existence of the external object. Consequently the

hold out in the struggle with vice,' are, for the want of strict proofs, adduced as arguments;

the conception of a will of the Supreme Being, as a reality inhering in him, is, like the former, either a void, or (what is still worse) an anthropomorphistical conception, which, when it, as is unavoidable, is taken into the practical, spoils all religion, and transforms it into idolatry. — But when I form to myself a conception of the *ens realissimum* as the ground of all reality, I say, God is the being who compriseth the ground of all that is in the world for which we men have need to assume an understanding, (for instance, all that is conformable-to-end in it); he is the Being from whom the existence of all the mundane beings has its origin, not from the necessity of its nature (*per emanationem*), but according to a relation for which we men must assume a free will in order to render intelligible to ourselves the possibility of it. Here now, what the nature of the Supreme Being is (objectively), may be totally inscrutable and placed quite beyond the sphere of all theoretical cognition possible for us, and yet (subjectively) reality in a practical view (to the course of life) remain to these conceptions; relatively to which an analogy only of the Divine understanding and will with those of man and his practical reason may be assumed, notwithstanding, theoretically contemplated, no analogy at all has place between them. From the moral law, which our own reason prescribes to us with authority, and from the theory of the nature of things in themselves, proceeds now the conception of God, to form which for ourselves practical pure reason necessitates.

When therefore one of these vigorous men, who with inspiration announce a wisdom that gives them no trouble, because they catch this goddess by the hem of her garment, and pretend to have made themselves master of it, says, 'he despises the man who thinks to make to himself his God;' that belongs to the peculiarities of their tribe, whose *ton* (as particularly favoured) is gentle. For it is self-evident that a conception, which must proceed from our reason, must be formed by ourselves. Had we chosen to take it from any one phenomenon (an object of experience), our ground of cognition had been empirical, and unfit for the validity for every body, consequently for the apodictical practical certainty, which an universally binding law must have. We must rather hold up first a wisdom, that appears personally to us, to that conception, formed by ourselves, as the archetype, in order to see whether this person correspond to the character of that archetype made by ourselves; and even when we meet with nothing

in

ments; whereas in these very principles *a priori* practical reason sufficiently feels its strength and vigour, otherwise never perceived beforehand, and is rather emasculated and lamed by the supposititious empirical (which is on that account unfit for universal legislation).

Finally, the most modern German wisdom puts its summons to *philosophise by feeling* (not, like the wisdom several years older, to set the *moral feeling* or *sentiment* in motion and activity by *philosophy*) to a trial, by which it must of necessity lose. Its challenge runs thus, 'The surest mark of the genuineness of the philosophy of man is not that it makes us more certain, but that it makes us *better*.' — Of this trial it cannot be required that man's growing better (effectuated by the feeling of a mystery) shall be attested by a mintmaster essaying its morality upon the touchstone; for the due weight of good actions every one may easily poise, but, of how much intrinsic value and purity [*Mark Fein*] they contain in the mindedness who can give a testimony *publicly valid*? There would need, however, to be such a one, if thereby shall be proved that that feeling makes better men in general,

in him that is inconsistent with it, it is nevertheless absolutely impossible to cognise the suitableness to it otherwise than by supersensible experience (because the object is supersensible): which is absurd. *Theophany* makes of Pato's idea an *idol*, which cannot be otherwise honoured, than superstitiously; whereas *theology*, which sets out from conceptions of our own reason, erects an ideal, which, as it springs even from the most sacred duties independent on theology, extorts from us adoration.

general, and that the scientific theory is fruitless and inactive. No experience can furnish the best for this, but it must be sought in practical reason only, as given *à priori*. The internal experience, and the feeling (which is in itself empirical and herewith contingent), are incited by the voice of reason only (*dictamen rationis*) which speaks distinctly to every body and is susceptible of a scientific cognition; but not a particular rule for reason introduced by feeling, which is impossible; because that could not otherwise be universally valid. It must therefore be to be perspected *à priori* what principle can and does make better men, when it is brought home to their breasts but distinctly and incessantly, and attention is given to the powerful influence, which it has on them.

Now every man finds in his reason the idea of duty and, when inclinations that tempt him to disobedience to it stir in him, trembles at hearing its brazen voice. He is convinced that, should all the latter united conspire against it, the majesty of the law, which his own reason prescribes to him, must undoubtedly outweigh them all, and his will has also the ability. All this can and must be represented to man, if not scientifically, at least distinctly, that he may be certain as well of the authority of his reason commanding him, as of its commandment itself; and is so far theory. — I shall now represent man in the manner he questions himself: What is that in me, which occasions that I can sacrifice the most intimate allurements of my instincts, and all

the wishes which proceed from my nature, to a law, that promises me no advantage as an equivalent, and threatens no loss by its transgression; nay, that I honour the more sincerely the stricter it commands and the less it offers as a reward? This question by the astonishment at the greatness and sublimity of the internal predisposition in humanity, and at the same time the impenetrability of the mystery which veils it (for the answer, It is *liberty*, were tautological, as this constitutes the very mystery itself), stirs up the whole soul. One never wearies viewing it, and admiring in one's self a power that yields to no power of nature; and this admiration is just the feeling generated from ideas which, if, besides the doctrines of moral in schools and from pulpits, the representation of this mystery made up a particular and often repeated occupation of teachers, would penetrate deep into the soul, and not fail to make men morally better.

Here is what Archimedes stood in need of, but did not find, a firm *point* upon which reason can set its *lever*, and indeed without placing it either upon the present, or upon a future world, but merely upon its internal idea of liberty, which is shown by the immoveable moral law, as a solid foundation, in order, by its principles, to move the human will, even in spite of the resistance of all nature. That is now the mystery which, but after a slow unfolding of the conceptions of the understanding and carefully proved principles, therefore but by labour, can be
felt.

felt. — It is not given empirically (proposed to reason for solution), but *à priori* (as actual introspection within the bounds of our reason), and enlarges even the cognition of reason, but only in a practical view, to the supersensible: not by a *feeling* that grounds cognition [the mystical feeling], but by a distinct *cognition*, which has influence on (the moral) feeling. — The *ton* of him who thinks himself in the possession of this true mystery cannot be gentle; for nothing but dogmatical or historical knowledge puffs up. He by a critic of his own reason is inevitably obliged to a moderation in pretensions [modesty]; but the laying claim to the latter, the reading of Plato and of the classics, which belongs but to the culture of taste, does not constitute the philosopher.

The denunciation of this pretension seemed to me, at this juncture, not to be superfluous, as setting-off with the title of philosophy is become a matter of fashion, and the philosopher of *visions* (if it be granted that there are such things), may, on account of the ease of attaining the summit of knowledge by a bold soaring, insensibly collect a number of adherents (as boldness is catching): which the police in the realm of science cannot suffer.

The disrespectful manner of speaking of the *formal* of our cognition (which is however the chief business of philosophy) as pedantry, and of naming it a '*formgiving manufactory*,' confirm this suspicion, namely, a secret intention, under the mask of philosophy to proscribe, in fact, all philosophy, and as her

vanquisher to assume a gentle *ton* (*pedibus subiecta vicissim Obteritur, nos exaequat victoria coelo*. Lucret.). — But how little this attempt can succeed, in opposition to a critic, always vigilant, may be gathered from the following example:

In the form consists the essence of the thing (*forma dat esse rei*, say the Scholastics), so far as it shall be cognised by reason. If this thing is an object of sense, it is the form of things in the intuition (as phenomena), and the pure mathematics themselves are nothing but a doctrine of forms of pure *intuition*; in like manner as metaphysic, as pure philosophy, first grounds its cognition upon *forms of thinking*, under which every object (the matter of cognition) may afterwards be subsumpted. Upon these forms rests the possibility of all synthetical cognition *à priori*, the having of which we cannot disown. — But the transition to the supersensible, to which reason irresistibly urges us on, and which it can do but with a morally practical view, it effectuates by such (practical) laws only, which constitute the principle, not the matter of free actions (their end) but only their form, the fitness of their maxims for the universality of a legislation in general. In neither of the fields (the theoretical and the practical) is it a *forming* arbitrarily arranged (for the behoof of the state) *in the manner of a plan* or even of a *fabrio*, but a sedulous and solicitous labour of the subject's preceding all *manufacture* handling the given object, nay, without thinking of it, to adopt and to estimate his own

own faculty (of reason); whereas the man of honour, who discovers an oracle for the vision of the supersensible, cannot exculpate himself from having laid the foundation of it in a mechanical treatment of the understandings, and given it the name of philosophy but for the sake of dignifying.

— But to what purpose all this dispute between two parties, who have at bottom the very same design, To make men wise and virtuous? — It is a noise about nothing, a disagreement and misunderstanding, with regard to which no reconciliation, but only a reciprocal explanation is requisite, in order to enter into a contract, which for the future renders unanimity more cordial.

The veiled goddess, to whom we both bend the knee, is the moral law in us, in its inviolable majesty. We hear her voice, and perfectly understand her commandment also; but in hearing are in doubt whether it proceeds from man, out of the perfection of the potency of his own reason itself, or from another, whose essence is unknown to him, and who speaks to man by this his own reason. At the bottom we would perhaps do better to save ourselves the trouble of this investigation; as it is merely speculative and, whatever principle be laid as a foundation, what is incumbent on us to do remains always the same (objectively): only that the dialectic procedure to reduce according to the logical method the moral law in us to distinct conceptions, is solely *philosophical*, but that, to personify that law and to make out of the

morally commanding reason a veiled Isis, (though we cannot ascribe to her any other properties, than those found according to that method), an *aesthetical* mode of representation of the very same object; which may indeed, when the principles are once established by the former, be afterwards used, in order by a sensible though but analogical exhibition to animate those ideas, yet always with some danger of falling into a fanatical vision, which is the death of all philosophy. —

To have a *presentiment* of that goddess, would then be an expression, that signifies nothing more than, To be led by one's moral *feeling* to conceptions of duty, before the principles upon which that feeling depends are made *distinct*; which presension of a law, as soon as it passes, by a scholastic treatment, to a *clear* insight, is the proper business of philosophy, without which that decision of reason would be but the voice of an oracle,* which

* This traffic of mystery is of a quite peculiar nature. Its adepts make no secret of their having kindled their light at Plato; and this pretended Plato freely owns, that, when one asks him, wherein it consists (what is thereby enlightened), he knows not. But so much the better! For it is evident that he, a second Prometheus, stole the spark immediately from heaven. One may well speak in a high tone when he is of the ancient hereditary nobility and can say: In our subtle times every thing that is said or done from feeling is wont to be held fanaticism. Poor Plato, hadst thou not the stamp of antiquity upon thee, and if one could, without having read thee, lay claim to learning, who would yet read thee in the *prosaic* age, in which are the highest wisdom, to see nothing but what lies before one's feet, and to assume nothing but what can be laid hold of with the hands? — But unfortunately this conclusion is not *consequent*; it proves too much. For Aristotle, an extremely prosaic philosopher, certainly has

which is exposed to all sorts of interpretations.

But 'if,' instead of accepting this proposal for an agreement, as Fontenelle said on another occasion, 'Mr. N. will absolutely believe in the oracle still; nobody can prevent him.'

has the stamp of antiquity upon him likewise, and could, according to that principle, lay claim to be read! — All philosophy, at bottom, is prosaic; and a proposal now to philosophise again poetically, might be received in the same manner as that to the merchant, To write his books for the future, not in prose, but in verse.

which is exposed to all sorts of interference.
But if, instead of becoming a witness
for an angry man, as I have been, I
remain calm, and let the law decide
in the end, I shall be able to do so.

And I shall be able to do so, I think,
because I shall be able to do so, I think,
because I shall be able to do so, I think,
because I shall be able to do so, I think,
because I shall be able to do so, I think,

ON THE
FAILURE
OF ALL
THE PHILOSOPHICAL ESSAYS
IN THE THEODICÉE.

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IN THE THEODICÉE.

By a theodicée is understood the defence of the supreme wisdom of the Author of the world against the accusation of that wisdom by reason, from what is contrary-to-end in the world. — This is named, defending the cause of God; though at bottom it may be nothing more than the cause of our assuming reason, mistaking its limits, which cause is not indeed the very best one, but must be so far approved, as (setting aside that self-conceit) man, as a rational being, has a right to prove all assertions, all the doctrines which reverence imposes on him, before he submits himself to them, in order that this reverence may be sincere and not hypocritical.

To this justification, now, is required that the opiniative advocate of God shall prove, either that that, which we judge in the world as contrary-to-end, is not so; or that, were it

it so, it must by no means be judged as a fact, but as an inevitable consequence of the nature of things; or lastly, that it must at least be considered not as a fact of the Supreme Author of all things, but merely of mundane beings, to whom something can be imputed, that is, men (perhaps higher, good or bad, spiritual beings also).

The author of a theodicee consents, then, that this action shall be brought before the court of reason; engages himself as counsel for the defendant, by formally refuting all the charges preferred by the plaintiff; and during the course of law must not put him off by an authoritative decision on the incompetency of the tribunal of reason (*exceptionem fori*), that is, must not dispatch the charges by imposing on the plaintiff a concession of the supreme wisdom of the Author of the world, which directly declares groundless, even without inquiry, all doubts that may be started; but must attend to the objections and, as they by no means derogate from the conception of the supreme wisdom,* by clearing them up and removing

* The proper conception of *wisdom* represents but the property of a will, to harmonize with the chief good, as the final end or *scope* of all things; *art*, on the other hand, but the faculty in the use of the fittest means to *ends laid down at pleasure*; art, when it proves itself as such, (which is adequate to ideas, whose possibility transcends all introspection of human reason, for instance, when mean and end, as in organized bodies, produce one another reciprocally), as a *divine art*, may not be improperly distinguished by the name of wisdom; yet, in order not to permute the conceptions, by the name of a wisdom of art of the Author of the world, for the purpose of distinguishing it from his *moral wisdom*. Teleology (and by it, physicotheology) gives abundant proofs of the former
in

removing them, render every thing comprehensible. — One thing, however, he has no occasion to enter on, namely, to prove the supreme wisdom of God from what experience teaches of this world; for in this he would absolutely not succeed, as omniscience is thereto requisite, in order in a given world (as it gives to cognise itself in experience) to cognise that perfection, of which may be said with certainty that there is nowhere any greater in the creation and its government possible.

But the contrary-to-end (*das Zweckwidrige*) in the world, which may be opposed to the wisdom of its Author, is of a threefold nature:

I. The absolute contrary-to-end, which can be approved and desired by wisdom, neither as an end, nor as a mean.

II. The conditional contrary-to-end, which consists with the wisdom of a will, indeed never as an end, but yet as a mean.

The *first* is the moral contrary-to-end, as the proper bad (sin); the *second*, the physical contrary-

in experience. But from it no inference to the moral wisdom of the Author of the world is valid, because law of nature and moral law require quite heterogeneous principles, and the proof of the latter wisdom must be given *a priori* totally, therefore absolutely not grounded upon experience of what happens in the world. As now the conception of God, that shall be fit for religion (for we use it not for the behoof of the explanation of nature, of course in a speculative view) must be a conception of him as a moral Being; as this conception, as little as it can be grounded upon experience, just as little can it be exhibited from merely transcendental conceptions of an absolutely necessary Being, who is to us totally transcendent: so it is sufficiently evident that the proof of the existence of such a Being can be no other than a moral one.

contrary-to-end, evil (pain), — But there is a conformity-to-end (*Zweckmäßigkeit*) in the relation of the evils to the moral bad, as the latter once exists and neither can nor ought to be diminished; namely, in the conjunction of evils and pains, as punishments, with the bad, as a crime; and relatively to this conformity-to-end in the world the question is, whether in this justice be done to every one in the world. Consequently still a

III. species of the contrary-to-end in the world must be to be conceived, namely, the disproportion of crimes and punishments in the world.

The attributes of the supreme wisdom of the Author of the world, against which those contraries-to-end appear as objections, are likewise three:

First, his HOLINESS, as LEGISLATOR (Creator), in contradistinction to the moral bad in the world.

Secondly, his GOODNESS, as GOVERNOUR (Preserver), contrasted with the innumerable evils and pains of the rational mundane beings.

Thirdly, his JUSTICE, as JUDGE, in comparison with the evil state, in which the disproportion between the impunity of the vicious and their crimes seems to show itself in the world.*

The

* These three attributes, of which the one can by no means be reduced to the other, as for instance justice to goodness, and so the whole to a smaller number, constitute the moral conception of God. Nor can their order

be

The answer to those three impeachments must be represented in the abovementioned threefold different manner, and proved according to their validity.

I. The first vindication of the holiness of the Divine will on account of the moral bad, which is complained of as disfiguring the world, his work, consists in this:

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a. That

be altered (as for example to make the goodness the chief condition of the creation of the world, to which the holiness of legislation is subordinated), without derogating from religion, which bottoms upon this very moral conception, Our own pure (practical) reason determines this order of rank, as, when the legislation conforms itself to the goodness, there is no more dignity of it and no firm conception of duties. Man wishes first of all, it is true, to be happy; but perspects, and grants (though unwillingly) that the worthiness of being happy, that is, the consension of the use of his liberty with the holy law, must in the decree of the Author be the condition of its validity and therefore necessarily precede. For the wish, which the subjective end (of self-love) has at bottom, cannot determine the objective end (of wisdom), which the law, that gives the will unconditionally the rule, prescribes. — Punishment in the exercise of justice is by no means grounded as a mean, but as an end in the legislative wisdom: the transgression is combined with evils, not in order that another good may arise, but because this combination is in itself, *id est*, morally and necessarily, good. Justice, it is true, presupposes goodness of the legislator (for if his will did not tend to the weal of his subjects, it could not oblige them to obey him); it is not however goodness, but as justice essentially different from it, though comprehended in the universal conception of wisdom. Hence the complaint of the want of justice, which shows itself in the lot that falls to men here in the world, is not that the good do not fare *well* here, but that the bad do not fare *ill* (though, when the former is superadded to the latter, the contrast still augments this difficulty). For in a divine government even the best man cannot ground his wish for wellbeing upon the Divine justice, but must always upon His goodness: because he, who does his duty merely, can lay no claim to the favour of God.

a. That there is by no means such an absolute contrary-to-end, as we take the transgression of the pure laws of our reason to be, but that it is only a fault in the eye of human wisdom; that the Divine judges them according to quite other rules incomprehensible to us, where, what we indeed find rejectable with reason relatively to our practical reason and its determination, may perhaps, in relation to Divine ends and supreme wisdom, be the fittest mean, as well for our particular weal, as for the good of the world in general; that the ways of the Supreme are not our ways (*sunt Superis sua jura*), and we err, when we judge that, which is a law but relatively for men in this life, absolutely as such, and thus hold that, which seems to our contemplation of things from a station so low contrary-to-end, to be so likewise, when contemplated from the highest station. — This apology, in which the defence is worse than the charge, requires no refutation, and may certainly be freely left to the detestation of every person, who has the smallest sentiment of morality.

b. The second pretended vindication grants, it is true, the actuality of the moral bad in the world, but excuses the Author of the world by its not having been possible to be prevented; because it is grounded upon the limits of the nature of men, as finite beings. — But thereby that bad itself would be justified; and, as it cannot be imputed to men as their fault, one would need to cease to name it a moral bad.

c. The

c. The third vindication, that, suppose that with respect to what we denominate moral bad men are actually guilty, no guilt must be imputed to God, as he hath from wise causes merely permitted, as a fact of men, but by no means approved and willed or prepared, that bad, tends (if no difficulty shall be found in the conception of the mere *permitting* of a Being, who is the sole Author of the world) to the same consequence with the foregoing apology (b), namely, that, as it was impossible for God himself to hinder this bad, without derogating from other higher and even moral ends, the ground of this evil (for it must now be properly named thus) must be unavoidably to be looked for in the essence of things, namely, the necessary limits of humanity as finite nature, and consequently cannot be imputed to it.

II. The justification of the Divine goodness for the evils, namely, pains, which are complained of in the world, consists herein,

a. That in the fates of men a preponderance of evil over the agreeable enjoyment of life is falsely supposed, because every one, however badly he may fare, chuses rather to live, than to be dead, and those few, who resolve on the latter, so long as they themselves delay it, thereby allow that preponderance still and, when they are insane enough to destroy themselves, merely pass to the state of insensibility, in which no pain can be felt. — But the answer to this sophistry may surely be left to the decision of every man of a sound understanding, who has lived and

reflected long enough on the value of life to be able to pronounce a judgment on this, when the question is proposed to him, Whether, I will not say on the same, but on any other conditions he pleases (only not of a fairy, but of this our terrestrial, world), he would not wish to act the play of life over again.

b. To the second justification, that the preponderancy of the painful feelings over the agreeable cannot be separated from the nature of an animal creature, like man, (as count Veri maintains in his book *On the Nature of Pleasure*) — one would reply, that, if it is so, there occurs another query, Why the Author of our existence has called us into life, when, according to our just calculation, it is not worthy of being wished for by us? Ill-humour here, as the Indian woman said to Dschingiskhan, who could neither give her satisfaction for the violence suffered, nor afford her security against the future, would answer, 'If thou wilt not protect us, why dost thou conquer us?'

c. The third solution of the knot is, that for the sake of a future felicity God hath placed us out of goodness in the world, but that that beatitude which may be hoped for must be preceded by a state of thorough trouble and misery of the present life, where we must by the struggle with difficulties become worthy of that future glory. — But, that this time of probation (in which the most succumb, and the best have no proper satisfaction in their life) shall absolutely be the condition by the Supreme Wisdom of the pleasure that one day or other

other may be enjoyed by us, and that it was not feasible to let the creature become contented with every epoch of his life, may indeed be pretended, but absolutely cannot be perspected, and by an appeal to the Supreme Wisdom, who hath so willed it, the knot may be cut, to be sure, but not untied: to resolve which, however, the theodiccée engages.

III. To the last charge preferred against the justice of the Governour of the world,* is answered:

a. That the pretext of the impunity of the vicious in the world has no ground; because every crime, according to its nature, carries with itself here the punishment suitable to it, as the internal reproaches of conscience torment the vicious more than furies would. — But in this judgment there is evidently a misunderstanding. For the virtuous man herein lends his character of mind to the vitious, namely, conscientiousness in its whole strictness which, the more virtuous the man is, punishes the more rigorously on account of the smallest transgression,

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* It is remarkable that among all the difficulties of uniting the course of the events of the world with the divinity of its Author, none forces itself so strongly on the mind, as that of the appearance of *justice* therein wanting. If it happens (though it is but seldom,) that an unjust villain, especially one possessing power, does not escape out of the world unpunished; the impartial spectator, in a manner reconciled to heaven, rejoices. No other conformity-to-end in nature excites his affect to such a degree by the admiration of it, and so to speak lets the hand of God be so easily discerned. Why? It (the conformity-to-end) is here moral, and the only one of the sort, which one may hope to perceive in some measure in the world.

that the moral law in him disapproves. But, where this cast of mind and with it conscientiousness is wanting, there is likewise wanting the tormentor for crimes committed; and the vicious, if he can but escape the external chastisement for his crimes, laughs at the anxiety of the honest man to torment himself internally with his own rebukes; but the small reproaches, which he may sometimes make himself, he makes either not at all through conscience, or, if he has any, they are abundantly outweighed and requited by the sensual pleasure, for which only he has a taste. — If that charge shall be further refuted

b. by this, That it is indeed not to be denied that there is absolutely to be found no proportion conformable to justice between guilt and punishment in the world, and one must often perceive with indignation in the course of it a life led with crying injustice and yet happy to the very end; that this however lies in nature and is not intentionally prepared, consequently is not moral dissonance, because it is a property of virtue to struggle with adversity, (to which belongs the pain that the virtuous must suffer by the comparison of his own misfortune with the good fortune of the vicious), and sufferings serve but to enhance the value of virtue, therefore in the eye of reason this dissonance of the undeserved evils of life is resolved into the most glorious moral concord; — this solution is opposed by this, that, though these evils, when they, as the whetstone of virtue, either

either *precede* or accompany it, may, it is true, be represented as in a moral harmony with it, when at least the end of life crowns the latter and punishes vice; but that, when even this end falls out nonsensically, of which experience gives many examples, suffering seems to have fallen to the lot of the virtuous, not *in order* that his virtue shall be pure, but *because* it has been so (but on the other hand was contrary to the rules of prudent self-love): which is directly the contrary to justice, as man is able to form a conception of it to himself. For as to the possibility that the end of this terrestrial life may not perhaps be the end of all life, this possibility cannot be valid as a *vindication* of Providence, but is merely an authoritative decision of the morally faithful reason, by which the sceptic is referred to patience, but not satisfied.

c. If finally the third solution of this unharmonious proportion between the moral value of men and the lot that falls to them, shall be attempted, by saying that, In this world must be judged all weal or ill as a consequence of the use of the faculties of men merely according to laws of nature, proportioned to their applied address and prudence, at the same time to the circumstances also, into which they accidentally fall, but not according to their agreement with supersensible ends; whereas in a future world another order of things will subsist, and every one will obtain what his deeds here below are worth according to a moral judgment; — thus is this presupposition arbitrable. Reason, if it

does not as a morally legislative faculty give an authoritative decision conformable to its interest, must rather find it probable according to mere rules of theoretical cognition, That the course of the world according to the order of nature, as here, so for the future, will determine our fate. For what other clew has reason for its theoretical presumption, than the law of nature? and, though it allowed itself, as was required of it (no. b.), to be referred to patience and the hope of a better future world; how can it expect that, as the course of things here according to the order of nature is of itself wise, it would according to the same laws in a future world be unwise? As, according to them, there is no comprehensible relation at all between the internal determining grounds of the will (namely; the moral cast of mind) according to laws of liberty, and between the (for the most part external) causes of our well-being independent of our will according to laws of nature; so the presumption remains, that the agreement of the fate of men with a Divine justice, according to the conceptions we form of it, is as little to be expected there as here.

The issue of this process before the *forum* of philosophy is, that all theodicee has hitherto not performed what it promises, namely, to justify the moral wisdom in the government of the world against the doubts, which are entertained of it from what experience gives to cognise in this world; though indeed these doubts as objections, as far as our insight into the nature of our reason reaches with

with regard to the latter, cannot prove the contrary. But whether in progress of time more proper grounds of its vindication may not be found, not to absolve the arraigned wisdom (as hitherto) merely *ab instantia*, remains still undetermined; if we do not succeed in shewing with certainty that our reason is absolutely unable for *the introspection of the relation, which a world, as we may always know it by experience, bears to the Supreme Wisdom*; for then all farther essays of opiniative human wisdom to perspect the ways of Divine wisdom are totally rejected. That at least a negative wisdom, the insight of the necessary limitation of our pretensions with regard to what is beyond our reach, is attainable by us, must, in order to put an end *for ever* to this lawsuit, yet be proved; and this may be easily done.

We have a conception of a *wisdom of art* in the arrangement of this world, to which for our speculative faculty of reason objective reality is not wanting, for the purpose of arriving at a physicotheology. In like manner have we a conception of a *moral wisdom*, which may be placed in a world in general by a most perfect Author, in the moral idea of our own practical reason. — But of the *unity in the agreement* of that wisdom of art with the moral wisdom in a sensible world we have no conception, and can never hope to reach it. For, to be a creature, and as a being of nature, to follow the will of its Author merely; but yet, as a free agent (who has his will independent on external influence, which
may

may be very contrary to the former), to be capable of imputation; and nevertheless to consider his own fact at the same time as the effect of a Supreme Being; are an association of conceptions, which we must conceive, it is true, in the idea of a world, as the chief good; but which he only, who penetrates to the knowledge of the supersensible (intelligible) world, and perspects the manner, in which it forms the basis of the sensible one, can introspect: upon which insight only the proof of the moral wisdom of the Author of the world can be grounded in the latter, as this presents but the phenomenon of the former world, — an insight which no mortal can attain.

All theodicee ought, properly speaking, to be an *explication* of nature, so far as God makes known by it the design of his will. Now every explication of the declared will of a legislator is either *doctrinal* or *authentic*. The former is what discovers by reasoning that will from the expressions, which it has used, in conjunction with the designs of the law-giver otherwise known; the latter the legislator himself gives.

The world, as a work of God, may be contemplated by us as a divine publication of the *designs* of his will. In this however it is *frequently* for us a shut book; but it is *always* this, when, to conclude from it, though an object of experience, even the *final end* of God (which is always moral), is aimed at. The philosophical essays of this sort of explanation are doctrinal, and constitute the proper theodicee,

theodicée, which may therefore be termed the doctrinal one. — Yet the mere obviating of all objections to the Divine wisdom cannot be refused the name of a theodicée, when it is a *divine authoritative decision*, or (which in this case is to the same purpose) when it is a judgment of the same reason, by which we form to ourselves of necessity and before all experience the conception of God as a moral and wise Being. For there God is by our reason the very expounder of his own will announced by the creation; and this exposition we may denominate an *authentic theodicée*. Then, however, that is not the exposition of a *reasoning* (speculative) practical reason, but of a practical reason *possessing potency*, which, as it is without farther grounds absolutely commanding in legislating, may be considered as the immediate declaration and voice of God, by which he giveth a meaning to the letter of his creation. Such an authentic interpretation, now, I find in an ancient sacred book allegorically expressed.

JOB is represented as a man, to the enjoyment of whose life every thing possible to be conceived was united, in order to render it perfect. Healthy, opulent, free, a commander of others whom he may make happy, surrounded by a happy family, among beloved friends; and above all (what is the most essential), contented with himself in a good conscience. All these riches, the latter excepted, a hard fate hung over him for a trial suddenly tore away from him. From the astonishment at this unexpected overthrow
come

come by degrees to recollection, he gave vent to complaints against his disaster; on which between him and his friends who are present under a pretext to console themselves is soon begun a disputation, wherein both parties, every one according to his own way of thinking (but chiefly according to his situation), set forth their particular theodicee, for the moral interpretation of that bad fate. Job's friends declare themselves for the system of the interpretation of all evil in the world from Divine justice, as so many *punishments* for crimes perpetrated; and, though they could not name any, with which they could charge the unfortunate man, they believed to be able to judge *à priori* that he must needs be guilty of some, else it would not be possible according to the Divine justice that he should be unhappy. Whereas Job — who protests, with emotion, that his conscience does not reproach him in the least on account of his whole life; but as to inevitable human faults, God himself knoweth that he made him as a frail creature, — declares himself for the system of the *inconditional decree of God*. *He is of one mind*, continues Job, *and who can turn him?*

In what both parties reason or, if I may be allowed the word, overreason there is nothing remarkable; but the character, in which they do so, merits the more attention. Job speaks as he thinks, and every man in his situation would be of the same mind; his friends, on the other hand, speak as if the Almighty, on whose affair they decide, and to gain

gain whose favour by their judgment they have more at heart than the truth, listened to them in secret. These their tricks, for the sake of appearance to maintain things, which they must allow they do not perspect, and to feign a conviction, which in fact they have not, contrast well with Job's plain sincerity, which is so far from false flattery as almost to border on temerity, greatly to his advantage. *Will you, says he, speak wickedly for God? and talk deceitfully for him? Will ye accept his person? will ye contend for God? He will surely reprove you, if ye do secretly accept persons! — for an hypocrite shall not come before him.*

The latter actually confirms the issue of the history. For God deigned to discover to Job the wisdom of his creation, chiefly on the side of its inscrutableness. He let him view the beautiful side of the creation where ends comprehensible to man set the wisdom and bountiful care of the Author of the world in an unambiguous light; but on the other hand the frightful side too, by naming to him productions of his potency and among these even pernicious dreadful things, every one of which, it is true, seems to be adjusted for itself and for its species conformably-to-end, but with regard to others and even to men destructive, contrary-to-end, and not harmonizing with an universal plan arranged by goodness and wisdom; whereby however he sheweth the disposition and preservation of the whole announcing the wise Author of the world, though at the same time his ways, inscrutable

inscrutable to us, must be hidden even in the physical order of things, how much more then in their connexion with the moral (which is yet more impenetrable to our reason)? — The conclusion is, that, as Job acknowledges to have judged, not maliciously, for he is conscious to himself of his probity, but only imprudently, on things, which are too high for him, and which he does not understand, God pronounceth the condemnation of Job's friends, because they did not speak of him (God) so well (in point of conscientiousness), as his servant Job. If now the theory, which every one on both sides maintains, be contemplated, that of his friends may carry with it rather the appearance of more speculative reason and pious humility: and Job in all probability would have experienced a bad fate before every tribunal of dogmatical theologians, before a synod, an inquisition, a reverend classis, or every chief consistory of our time (one only excepted). Therefore, only the sincerity of the heart, not the preference of knowledge, the honesty to acknowledge his doubts openly, and the aversion to feign conviction, where it is not felt, chiefly before God (where this craft besides is absurd), are the properties, which in the Divine judgment have decided the preference of the man of probity, in the person of Job, over the religious flatterer.

But the belief, which arose to him by so strange a solution of his doubts, namely, merely the conviction of his ignorance, could enter into the mind of none but him, who in the

the midst of his greatest doubts could say, *till I die I will not remove my integrity from me, &c.* For by this mindedness he proved that he did not ground his morality upon the belief, but the belief upon the morality: in which case this belief only, however weak it may be, is of a pure and genuine sort, that is, of that sort, which grounds a religion, not of courting favour, but of the good life.

Concluding Observation.

The theodicée, as has been shown, has not so much to do with a problem for the advantage of science, as rather with an affair of belief. From the authentic theodicée we saw that in such things it does not depend so much upon reasoning, as upon sincerity in the observation of the inability of our reason, and upon the honesty not to falsify ones thoughts in the utterance, let them be falsified with ever so pious a view. — This occasions the following short contemplation on a rich fund of matter, namely, sincerity, as the chief requisite in affairs of faith, in collision with the propension to falsity and impurity, as the principal defects in human nature.

That what one says either to himself or to another, is *true*, he cannot always be answerable (for he may err); but he can and must be answerable for his profession or his acknowledgment's being *veracious*, for of it he is immediately conscious to himself. In the former case he compares his asseveration with the object in the logical judgment (by the understanding); but in the latter, as he professes

his holding true, with the subject (before conscience). Does he make the profession relating to the former, without being conscious to himself of the latter? he lies, as he gives out something else than what he is conscious of. — The observation that there is such an impurity in the human heart, is not new (for Job made it); but one would almost think that the attention to it is new to teachers of morals and religion: so little is it found, that they, notwithstanding the difficulty which a purifying of the minds of men, even if they *would* act conformably to duty, carries with it, have made sufficient use of that observation. — This veracity may be named the *formal conscientiousness*, the *material* consists in the circumspection to venture nothing on the risk of its being wrong: as on the contrary that consists in the consciousness of having employed this circumspection in the given case. — Moralists speak of an erring conscience. But an erring conscience is a nonentity; and, were there such a thing, one could never be sure to have acted right, because the judge himself in the last instance might err. I may err, it is true, in the judgment, *in which I believe* to be in the right: for that belongs to the understanding, which only judges objectively (whether true or false); but in the consciousness, *Whether in fact I believe* to be in the right (or merely pretend it), I absolutely cannot err, as this judgment or rather this position says nothing but that I thus judge the object.

In the carefulness to be conscious to one's
self

self of this belief (or unbelief), and not to give out any holding-true, of which one is not conscious, consists just the formal conscientiousness, which is the ground of veracity. Therefore, who says to himself (and, what is the same in the confessions of religion, before God) that *he believes*, without perhaps having examined himself, whether he is in fact conscious to himself of this holding-true or even of such a degree of it,* lies not only

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* The mean of extorting veracity in external deposing, *the oath (tortura spiritualis)* is held before a human tribunal not only allowed, but indispensable: a sad proof of the little reverence of men for truth, even in the temple of public justice, where the mere idea of it ought of itself to inspire the greatest reverence! But men lie with regard to conviction, which they have not, at least of the sort, or in the degree, they pretend, even in their internal professions; and, as this improbity (since it tends by little and little to actual persuasion) may also have external pernicious consequents, so, that mean of extorting veracity, the oath, (but indeed only an internal one, that is, the essay, whether the holding-true stand the test of an internal *juratory* examining of the profession) may too be very well used to make the audaciousness more daring, at last, however, if not to restrain externally violent assertions, at least to stupify. — By an human tribunal nothing more is demanded of the conscience of him that makes oath, than the engaging that, if there is a future Judge of the world (therefore a God and a life to come), he will be answerable to him for the truth of his external profession; *that there is such a Judge of the world*, is a profession not necessary to be demanded of him, because, if the former protestation cannot withhold the lie, the latter false profession would create just as little scruple. After this internal delation of an oath one would ask himself, Wouldest thou take upon the, by all that is dear and sacred to the, to answer for the truth of that weighty tenet of faith or another holden so? At such a demand conscience would be suddenly roused by the danger, to which one exposes himself by pretending more, than he can maintain with certainty, where the believing concerns an object that is not at all attainable by the way of knowing [theoretical introspection], but whose assuming, by its only rendering possible

in the most absurd manner (before a knower of hearts), but in the most wicked, because it saps the very foundation of every virtuous resolution, sincerity. It is easily conceived how soon such blind and external *confessions* (which are easily united with an internal confession just as false), when they furnish *means of acquisition*, may gradually occasion a certain falsehood in the cast of mind of even the commonwealth. — While this public purifying of the way of thinking in all probability remains deferred to a distant period, till it perhaps one day becomes an universal principle of education and doctrine under the protection of the liberty of thinking; a few lines still may be here bestowed on the contemplation of that vice, which seems to be deeply rooted in human nature.

There is something touching and which moves the soul in displaying a sincere character, divested of all falsehood and positive dissimulation; as integrity, however, a mere simplicity and rectitude of the way of thinking (especially when its ingenuity is excused) is the least that is requisite to a good character, and therefore it is not to be conceived upon what

possible the connexion of the chief practical principle of reason with that of the theoretical cognition of nature in one system (and thus reason agreeing with itself), is above all recommendable, but yet always free. — But professions of faith, whose source is historical, when they are enjoined others as precepts, must still more be subjected to this proof-by-fire of veracity: because here the impurity and feigned conviction is extended to move persons, and their guilt becomes a burden on him, who in a manner answers for the conscience of others (for men are willingly passive with their conscience).

what is grounded that admiration, with which we are impressed by such an object: it must then be, that sincerity is the property, with which human nature is the least endowed. A melancholy observation! As by that only all the other properties, so far as they rest upon principles, can have an intrinsic true value. None but a contemplative misanthrope (who wishes ill to nobody, but is inclined to believe every thing bad of men) can be doubtful whether to find men *worthy* of *hatred* or of *contempt*. The properties, on whose account he would judge them to be qualified for the former treatment, are those, by which they designedly do harm. That property, however, which seems rather to expose them to the latter degradation, can be no other, than a propensity, which is *in itself bad*, though it hurts nobody, a propensity to what can be used as a mean to no end whatever; which is therefore objectively good for nothing. The former bad is nothing but that of *enmity* (more mildly expressed, unkindness); the latter can be nothing else than a *lying disposition* (falsehood, even without any design to do hurt). The *one* inclination has a view, which may in certain other references be allowed and good, for instance, enmity against incorrigible disturbers of the peace. The *other* propensity, however, is that to the use of a mean (the lie) that, whatever be the view, is good for nothing, because it is *in itself bad* and blameable. In the quality of man of the former species there is *wickedness*, yet with which there may be combined a fitness for good ends in certain

external relations, and it sins but in the means, which are not rejectable in every view. The bad of the latter sort is *naughtiness* (*Nichtswürdigkeit*), by which all character is refused to man. — Here I chiefly insist on the impurity lying deeply concealed, as man knows to falsify even the internal declarations in presence of his own conscience. The less ought to surprise the external inclination to fraud; it must then be this, that, though every one knows the falseness of the coin, with which he trades, it can maintain itself equally well in circulation.

In de Luec's letters on the mountains, the history of the earth and of men, I remember to have read the following result of his in part anthropological journey. The philanthropic author set out with the good quality of our species, and sought the confirmation of it, where city luxury cannot have such influence to corrupt the minds, In the mountains, from Switzerland to the Harze; and, after his belief in disinterested helping (*Hülfleistende*) inclination began somewhat to stagger by an experience in the former, he at last infers this conclusion, *That man, as to benevolence, is good enough* (no wonder! for this rests upon implanted inclination, of which God is the Author); *if a bad* propensity to fine deceit were but not inherent in him* (which is likewise not

* In the very intermixture of the bad with the good lie the great springs, which rouse into action the dormant powers of humanity, and necessitate men to develope all their talents and to approach towards the perfection of their destination.

not astonishing; for to withhold this depends upon the character, which man himself must form in himself)! — A result of the inquiry that every body, even without having travelled in the mountains, might have met with among his fellow-citizens, nay, yet nearer, in his own breast.

in the own dress
among the fellow-Christians, nay, the members
of the monasteries, might have been with
it. Every body, even without having a master-
ship in himself, is a result of the society
from the character, which man himself must
be establishing for himself and his people.

THE
ONLY POSSIBLE
A R G U M E N T
FOR THE DEMONSTRATION
OF THE
EXISTENCE OF GOD

— If there's a pow'r above us,
(And that there is all nature cries aloud
Through all her works) he must delight in virtue.

ADDISON'S CATO.

P R E F A C E.

*Nec mea dona tibi studio disposta fideli
Intellecta prius quam sint, contenta relinquo.*

LUCRETIVS.

I have not so high an opinion of the use of an endeavour like the present, as if the most important of all our cognitions, THERE IS A GOD, were, without the assistance of deep metaphysical investigations, fluctuant and in danger. Providence hath not willed that our insights in the highest degree necessary to felicity should depend on the subtilty of fine syllogisms, but hath delivered them immediately to the natural common understanding which, when it is not perplexed and entangled by false art, does not fail to conduct us directly to the true and useful, so far as we stand in the utmost need of them. Hence that use of sound reason, which is even within the limits of common introspections, furnishes sufficiently convincing proofs of the existence and of the attributes of this Being, though the subtile inquirer always misses the demonstration and the suitableness of precisely determined conceptions or of regularly connected ratiocinations. One cannot
however

however forbear to search whether this demonstration does not somewhere present itself. For, not to mention the just desire, which an understanding accustomed to perquisition cannot avoid, to attain something complete and distinctly comprehended in a cognition so weighty, it is to be hoped that such an introspection, when one is master of it, may clear up much more in this subject. But to accomplish this end we must venture into the unfathomable depths of metaphysic. A dark ocean, unbounded by coasts and without beacons, where one must proceed like the mariner in a sea not yet navigated, who, as soon as he makes land, examines whether some unobserved currents have not, notwithstanding all the circumspection which the art of navigation may enjoin, disturbed his course.

This demonstration has never yet been discovered; of which however others have already taken notice. What I here deliver is the argument only for a demonstration, materials for building collected with great labour, which are presented to judges for examination, in order from their useful parts to execute the building according to the rules of congruity and stability. As little as I wish that which I deliver to be held the demonstration itself, as little are the solutions of the conceptions, I use, definitions. They are, meseems, right criteria of the things which I handle, fit for attaining suitable explications serviceable in themselves for the purpose of truth and distinctness, but they wait for the last hand of the artist, in order to be numbered

bered among definitions. There is a time when, in such a science as metaphysic, one takes upon himself to explain and to demonstrate every thing, and there is a time, when one attempts such undertakings but with fear and diffidence.

The contemplations, which I expose to view, are the consequents of long reflection, but the mode of propounding bears the mark of an unfinished work, as various occupations have not allowed the thereto requisite time. It is however a very fruitless insinuation, to beg pardon of the reader, because one cannot, whatever be the reason, present him but with something crude and undigested. He, let the author excuse himself as he pleases, will never forgive it. In my case the figure of the work, not fully formed, is not so much to be ascribed to a neglect, as to an intended omission. My design was to trace but the outlines of a principal plan, according to which, I believe, if under exercised hands the drawing should receive more justness in the parts and a finished regularity on the whole, an edifice of no small excellence might be erected. In this view it had been unnecessary to bestow too much anxious care in accurately finishing all the strokes in single parts, as the sketch on the whole has first to wait for the judgment of masters in the art. I therefore have frequently adduced proofs, without pretending at present to be able to point out distinctly their connexion with the consequence. I have sometimes adduced common judgments of understanding too, without giving

giving them by logical art that form of solidity, which a component part in a system must have, either because I found it difficult, because the prolixity of the necessary preparation was not conformable to the size that the work ought to have, or because I believed to be entitled, as I announce no demonstration, to avoid the demand that is made with reason on systematical authors. A small part of those, who assume to themselves the judgment on the works of reason, cast bold looks to the whole of an essay, and chiefly contemplate the reference which, were certain defects supplied or faults corrected, the heads might have to a proper structure. It is this sort of readers, whose judgment is useful principally to human cognition. As to the other readers who, incapable of overlooking a connexion in the gross, fasten upon either the one or the other minute part with too nice inquiry, careless whether the censure, which it perhaps merits, affect the value of the whole, and whether meliorations in single parts may not support the chief plan that is faulty but in the parts, these readers, who never exert themselves, but to turn into ruins every edifice just commenced, may be to be dreaded on account of their numbers, it is true, but their judgment, with regard to the decision of true value, is with reasonable persons of little moment.

Perhaps in some places I have not explained myself sufficiently, in order to dissappoint those, who wish but for an apparent occasion to brand a publication with the bitter reproach

proach of heterodoxy; but what precaution could prevent this? I believe however to have spoken distinctly enough to those, who are not disposed to find any thing more in a writing, than what the author designed to put in it. I have, notwithstanding my positions deviate so much from those of others, engaged as little as possible in confutations. The comparison I leave to the reflection of the reader who has perspected both. Were the judgments of undissembled reason in persons thinking differently proved with the sincerity of an incorruptible counsel, who so weighs the reasons of two litigant parties, that he, in thought, even puts himself in the place of those who assign these reasons, in order to be as sensible of them as possible, and then first to decide to which party he is to devote himself; there would be much less disagreement in the opinions of philosophers, and an unfeigned equity in adopting the cause of the opposite in proportion to the possibility, would soon unite the scrutators in one way.

In a difficult contemplation, like the present, I can easily foresee that many positions will be erroneous, many illustrations insufficient, and much of the execution feeble and defective. I lay no claim to such an unlimited subscription of the reader, as I myself would hardly grant any author. Therefore it will not seem singular to me to receive from others better information on many points, and they will find me very docile and ready to listen to such instruction. It is difficult to give up the pretension to rightness, which one confidently

fidently shows when he begins to propound grounds, but it is not so difficult when this pretension is moderate, insecure and modest. Even the most refined vanity, when it understands itself, remarks that it is no less meritorious to allow one's self to be convinced, than to convince, and that that action redounds perhaps more to true honour, as more renunciation and self-trial is thereto requisite than to this. It may seem to be a violation of the unity, which must in the contemplation of this object be had in view, that now and then occur pretty ample physical dilucidations; but as my design in these cases is chiefly turned towards the method, by means of natural philosophy to ascend to the cognition of God, without such examples I could not well attain this end. The seventh contemplation of the second section will require somewhat more indulgence, especially as its contents are extracted from an anonymous work, I formerly published,* where this subject is treated more at

* Under the title of UNIVERSAL PHYSIOGONY AND THEORY OF THE HEAVENS. Königsberg and Leipzig 1755. This book, which is little known, must not have come to the knowledge of the celebrated *J. H. Lambert*; who six years afterwards propounded in his *Cosmological Letters* 1761. the very same theory, of the systematical constitution of the structure of the world in the gross, of the galaxy, of the nebulae &c., which is to be met with in my abovementioned Theory of the Heavens, in the first part and likewise in the preface, and something of it is pointed out in a short sketch in the present work. The agreement of the thoughts of this ingenious man with those I then propounded, which is to be perceived in even the smallest strokes, increases my presumption that this delineation will hereafter receive more confirmation.

at large, though in connexion with various somewhat hazarded hypotheses. The affinity, which at least the permitted liberty to venture on such explications has with my chief design, as also the wish to see judges pronounce on a few of these hypotheses, has given occasion to intermix this contemplation, which is perhaps either too short for understanding all its grounds, or too prolix for those who expect to find here nothing but metaphysic; they may, however, easily pass it over.

at least, though in connection with various
other and kindred subjects. The object
which at least the principal object of the
work is to explain the nature of the
thing, as also the way to see and
to explain of these subjects. The given
reason to explain the thing, which will be
a short and simple statement of the
all the grounds of the thing for those who
are to find them, nothing but more
that can, however, easily pass it over.

THE
ONLY POSSIBLE
A R G U M E N T
FOR THE DEMONSTRATION
OF THE
EXISTENCE OF GOD.

SECTION I.

ARGUMENT FOR THE DEMONSTRATION OF THE
EXISTENCE OF GOD.

CONTEMPLATION THE FIRST.

Of Existence in general.

The rule of profundity does not always require that even in the most penetrating propounding every occurring conception be unfolded or explained; when one is assured that the bare clear common conception can, in the case where it is used, occasion no misunderstanding; as the geometrician discovers

with the greatest certainty the most hidden properties and relations of the extended, though in this he makes use of the common conception of space merely, and as even in the deepest of all sciences the word REPRESENTATION, though its meaning can never be resolved by an explanation, is precisely enough understood and confidently used.

I therefore would not tower in these contemplations to the solution of the very simple and well-understood conception of existence, were it not here directly the case, where this omission might occasion confusion and great errors. It is certain that it can be applied without hesitation in all the other parts of philosophy without being developed as it occurs in common use, the only question of the absolutely necessary and contingent existence excepted, for here a subtile inquiry has drawn from an unfortunately formed otherwise very pure conception erroneous conclusions, which have diffused themselves over one of the most sublime parts of philosophy.

Let it not be expected that I am to make the beginning with a formal exposition of existence. It is to be wished that this were never done, where it is so uncertain to have expounded right, and this it is more frequently than one imagines. I shall proceed like one, who seeks the definition, and previously assures himself of what can be said with certainty either affirmatively or negatively of the object of the exposition, though he does not yet make out wherein consists its ample determinate conception. Long before an exposition

position of the object is hazarded, and even when one dares not venture to give it, much may be said of this object with the greatest certitude. I doubt whether it has ever been properly explained, what space is. But, without embarking in this, I am certain that, where it is, there there must be external references, that it can have no more than three measurements &c. Let a desire be what it pleases, it bottoms upon some one representation, and presupposes a pleasure in the object of desire &c. From what is certainly known of the thing previously to every definition that which belongs to the design of our investigation may often be quite surely deduced; and we venture but into unnecessary difficulties, when we soar thither. The rage for methods, the imitation (or rather the aping) of the mathematician, who advances securely upon a well-paved way, has on the slippery ground of metaphysic occasioned a multitude of such false steps, as one sees every day, and yet there is little hope that philosophers will thereby take warning and learn to be more circumspect. It is this method only, by virtue of which I hope for a few elucidations, which I have sought in vain from others; For, as to the flattering representation, which one frames, that he will by greater acuteness hit it better than others, it is obvious that all those, who have wished to lead us from the errors of others into their own, have so spoken.

1.

Existence is no Predicate at all or Determination of any one Thing.

This position seems strange and nonsensical, but it is indubitably certain. Take any subject you please, for example, Julius Caesar. Comprise in him all his imaginable predicates, even those of time and of place not excepted, you will soon comprehend that he can exist, or not exist, with all these designations. The Being, who gave existence to this world and to this hero in it, could cognise all these predicates, without excepting a single one, and consider him as a merely possible thing that, his decree excepted, doth not exist. Who can deny that millions of things, which actually exist not, according to all the predicates they contain, would, did they exist, be merely possible; that in the representation which the Supreme Being hath of them not a single one is wanting, though existence is not of the number, for he cogniseth them but as possible things. It cannot therefore have place that, when they exist, they contain a predicate more, for in the possibility of a thing according to its thorough designation no predicate at all can be wanting. And had it pleased God to create another series of things, another world, it would, though it is possible merely, have existed with all the designations and no others than he cogniseth in it.

The word existence, however, is used as a predicate

predicate and it may be done securely and without dread of errors, so long as it is not attempted to be derived from merely possible conceptions, as is usually done, when the absolutely necessary existence is to be evinced. For then one seeks in vain among the predicates of such a possible Being, existence is certainly not to be found among them. But existence in the cases where it occurs in common discourse as a predicate is not so much a predicate of the thing itself, as rather of the thought that one has of it. For instance, existence is suitable to the narwhale or sea-unicorn, but not to the land-unicorn. This means nothing, but that the representation of the seaunicorn is a conception of experience, that is, the representation of an existing thing. Hence in order to prove the rightness of this position of the existence of such a thing one does not search in the conception of the subject, for there are to be found predicates of possibility only, but in the origin of the cognition which we have of it. It is commonly said, I have seen it, or heard it from those, who saw it. It is therefore not a perfectly correct expression to say, A sea-unicorn is an existing animal, but conversely, the predicates, which I think together with an unicorn, are suitable to a certain existing seaanimal. Not, regular hexagons exist in nature, but the predicates which are thought together with a hexagon are suitable to certain things in nature, like the cells in honey-combs, or rock-crystal. Every human language from the contingencies of its origin has many faults

not to be altered, and it would be hypocritical and useless, where in the common use no misinterpretations at all can arise, to refine and to limit it, enough that, in the uncommon cases of a more elevated contemplation, where it is necessary, these distinctions are superadded. It will be but first possible to judge sufficiently of what has been handled in this number, when the reader shall have attended to what follows.

2.

Existence is the absolute Position of a Thing and is thereby distinguished from every Predicate, which as such is always laid down but relatively to another Thing.

The conception of position or laying down is perfectly simple and identical with that of entity in general. Now something can be posited or laid down as relatively merely, or rather the reference merely (*respectus logicus*) of something thought as a mark* to a thing, and then the entity, that is, the position of this reference, is nothing but the conception of conjunction in a judgment. If not this reference, but the thing in and of itself, is contemplated as posited, this entity is as much as existence.

So simple is this conception, that nothing can be said to its developement, but only to observe

observe the precaution that it be not permuted with the relations, which the things have for their marks.

When it is perspected that our whole cognition ultimately terminates in unresolvable conceptions, it is also comprehensible that there are some, which are almost insolvable, that is, where the marks are but very little clearer and simpler, than the thing itself. This is the case with our exposition of existence. I willingly acknowledge that by it the conception of the expounded becomes in a very small degree only distinct. But the nature of the object with reference to the faculty of our understanding allows no higher degree.

When I say God is omnipotent, this logical reference only is thought between God and omnipotence, as the latter is a mark of the former. Nothing farther is posited here. Whether God be, that is, be absolutely posited or exist, is by no means therein contained. Hence this entity is used quite right even in those references, which have nonentities against one another. *Exempli gratia*, Spinoza's god is subjected to incessant alterations.

When I represent to myself: God pronounceth [with regard to a possible world his almighty FIAT, he communicateth to the whole represented in his intellect no new designations, he addeth not a new predicate, but he positeth absolutely with all predicates this series of things, in which every thing was formerly posited but relatively to this whole.

The references of all predicates to their subjects never denote any thing existing, for in that case the subject must be presupposed as existing. God is omnipotent, must remain a true position even in the judgment of him, who does not acknowledge his existence, when he but understands me well, how I take the conception of God. But his existence must immediately pertain to the mode, in which his conception is posited, for in the predicates themselves it is not to be found. And if the subject is not presupposed as existing, every predicate remains undetermined, whether it belongs to an existing or merely possible subject. The existence itself can therefore be no predicate. If I say, God is an existing thing, it seems as if I expressed the reference of a predicate to the subject. There is however a fault in this expression. Accurately speaking, it ought to be: Something existing is God, that is, to an existing thing are suitable those predicates, which collectively taken we denote by the word, God. These predicates are posited relatively to this subject, but the thing itself together with all the predicates is absolutely posited.

By too prolix an exposition of an idea so simple I am apprehensive of becoming obscure. I might also be afraid of offending the tenderness of those, who chiefly complain of dryness. But without holding this censure of no moment, I must for this once entreat permission to this point. For I have as little taste as any body for the superfine wisdom of those, who fuse and sublimate secure and useful
concep-

conceptions in their logical crucibles, till they evaporate in smoke and volatile salts; yet the object of contemplation before me is of such a nature, that one must either totally give up every hope to attain a demonstrative certainty of it, or condescend to resolve his conceptions into these atoms.

3.

*Can I say that there is more in Existence than
in mere Possibility?*

Ere I answer this query I have first to observe that it must be distinguished, what is posited, and how it is posited. With regard to the former, in an actual thing nothing more is posited than in a merely possible thing, for all the designations and predicates of the actual may be met with in its mere possibility likewise, but as to the latter, more is by all means laid down by the actuality. For if I inquire, how is all this posited by the mere possibility, I perceive, it happens but relatively to the thing itself, that is, when there is a triangle, there are three sides, an enclosed space, three angles &c. or rather the references of these designations to such a something as a triangle, are merely posited, but if they exist, all this is absolute, that is, the thing itself together with these designations, consequently more posited. In order therefore in so subtle a representation to comprehend all that can prevent confusion, let us say that in an
existing

existing nothing more is posited than *in* a mere possible, (for then the subject in hand are its predicates,) but *by* something existing more is posited than *by* a mere possible, for that refers to absolute position of the thing itself. In the bare possibility is not the thing itself, but mere references of something to something are laid down according to the proposition of contradiction, and it remains sure that existence is properly no predicate of any one thing. Though my design is by no means to engage in refutations, and in my opinion, when an author divested of prejudices has read the thoughts of others and by reflection therewith connected has made them his own, he may give his judgment to the reader on his new doctrines differing from others pretty safely; I shall open it but with few words.

The Wolfian exposition of existence, that it is a completion of possibility, is evidently very indefinite. If it is not previously known, what besides the possibility can be thought in a thing, it cannot be learned by this exposition. Baumgarten adduces the thorough internal designation, so far as it completes what is left indeterminated by the predicates lying in the being or flowing therefrom, as that in which there is more in the existence than in the mere possibility; but we have seen that in the conjunction of a thing with all imaginable predicates there never lies a distinction of it from a merely possible thing. Besides the position: that a possible thing considered as such relatively to many predicates is indefinite,

finite, when it is taken according to the letter, may occasion a great error. For the rule of the exclusion of a middle between two contradictorily opposites forbids this, and it is therefore impossible that a man, for instance, shall not be of a certain stature, age, at a certain place, time &c. It must rather be taken in this sense; by the predicates thought together with a thing, many others are not at all determined, as by what is taken together in the conception of a man as such there is nothing made out with regard to particular criterions of age, place &c. But this sort of indeterminateness is then to be met with as well in an existing as in a merely possible thing, wherefore it cannot be used as a distinction between both. The celebrated Crusius numbered the somewhere and (if I may so say) the somewhen to the infallible designations of existence. But without our entering into the proof of the position itself: that all that exists must be either somewhere or somewhen, these predicates still appertain to merely possible things. For thus could exist at many determinate places at a certain time many a man, all whose designations, as they would be present with him did he exist, and who actually does not exist, the Omniscient well knoweth; and the errant jew Ahasverus in all the countries through which he is to travel, or during all the ages he is to live, is without doubt a possible man. It is to be hoped that the somewhere and somewhen will not be required to be sufficient criteria of existence but when the thing is actually there or
then

then, for it would in that case be required that that, which one engages to make known of itself by an apposite mark, shall be granted.

CONTEMPLATION THE SECOND.

OF THE INTERNAL POSSIBILITY SO FAR AS IT
PRESUPPOSES AN EXISTENCE.

1.

Necessary Distinction with regard to the Conception of Possibility.

All that is contradictory in itself, is internally impossible. This is a true position, though it is left undetermined, whether it be a true exposition. With regard to this contradiction however it is clear that something must be in a logical collision with something, that is, must negate or deny that which is in the very same thing at the same time. Even according to Crusius, who does not place this conflict in an internal contradiction merely, but maintains that it is in general perceived by the intellect according to a law natural to it, that it is in the impossible always a connexion not something, which is posited, and something by which it is at the same time annulled. This repugnance I denominate the formal of incogitableness or impossibility; the material that is given by this, and which is in such a conflict, is in itself something
and

and may be conceived. A square triangle is absolutely impossible. But a triangle and a square are something in themselves nevertheless. This impossibility rests upon entirely logical references of one cogitable to another, where the one cannot be a mark of the other. In the same manner in every possibility must be distinguished the something, which is thought, and then the agreement of what is at the same time thought in it, by the principle of contradiction. A Triangle that has a rectangle is in itself possible. The triangle and the rectangle are the *data* or the material in this possible, but the agreement of the one with the other according to the position of contradiction is the formal of the possibility. I shall likewise term the latter the logical in the possibility, as the comparison of the predicates with their subjects according to the rule of truth is nothing but a logical reference, the something or what is in this agreement is sometimes named the real of the possibility. Besides, I have to observe that no other possibility or impossibility than the internal or the absolute is here the matter in question.

2.

The internal Possibility of all Things presupposes some one Existence.

From what has been advanced it is obvious that the possibility drops, not only when an internal contradiction is to be met with, but
when

when no material, no *datum* to think exists. For then nothing cogitable is given, but all that is possible is something which can be cogitated, and to which is suitable the logical reference conformable to the proposition of contradiction.

If now all existence is annulled, nothing is absolutely posited, nothing at all is given, no material to any thing cogitable, and all possibility entirely vanishes. There is indeed no internal contradiction in the negation of all existence. For as to this would be required that something should be posited and at the same time annulled, but here there is nothing posited, so it cannot be said that this annulling involves an internal contradiction. But, that some one possibility is, and yet nothing at all actual, is inconsistent, because, when nothing exists nothing is given that is cogitable, and one contradicts himself, when he wills that something shall be possible. In the anatomizing of the conception of existence we have understood that the entity or being absolutely laid down, when these words are not used to express logical references of predicates to subjects, signifies the very same as existence. Therefore to say: nothing exists, is as much as, there is nothing at all; and it is a palpable contradiction to say, notwithstanding, that something is possible.

3.
It is absolutely impossible that Nothing at all exists.

That, whereby all possibility in general is annulled, is absolutely impossible. For these are synonymous expressions. Now by what contradicts itself is nullified the formal of all possibility, namely, the agreement with the principle of contradiction, hence what is contradictory in itself is absolutely impossible. This is however not the case as we have to contemplate the privation of all existence. For therein lies, as is proved, no internal contradiction. But by what the material and the data to all that is possible are annulled, by that is negated all possibility also. Now this takes place by nullifying all existence, therefore if all existence is negated, all possibility too is nullified. Consequently it is absolutely impossible that nothing at all exists.

4.

All Possibility is given in Something actual, either in it as a Designation, or by it as a Consequence.

It is to be shown of all possibility in general and of every one in particular that it presupposes something actual, whether it be one or more things. This reference of all possibility to any one existence may be two-

fold. Either the possible is but cogitable, so far as it itself is actual, and then the possibility in the actual is given as a designation; or it is possible because something else is actual, that is, its internal possibility is given as a consequent by another existence. The illustrative examples cannot yet be properly adduced here. The nature of that Subject, which is the only one that can serve for an example in this contemplation, must be first considered. Meanwhile, I have still to observe that I shall denominate that actual, by which as a ground the internal possibility of other actuals is given, the first real ground of this absolute possibility, in the same manner as the position of contradiction is its first logical ground, because in the agreement with it lies the formal of possibility, as that furnishes the *data* and the material in the cogitable.

I well conceive that positions of such a nature, as are propounded in this contemplation, stand in need of many illustrations, in order to obtain that light, which is requisite to evidence. But the so abstract nature of the subject itself is an obstacle to every effort to greater enlightening, in like manner as the microscopic artifices of seeing enlarge the image of the object sufficiently for the distinction of very small parts, but diminish in the same measure the clearness and vivacity of the impression. I shall however endeavour as much as I can to bring the thoughts of the existence, which always forms the basis of the internal possibility, to a somewhat greater proximity

proximity to the more common conceptions of a sound understanding.

You know that a fiery body, a cunning man, or the like, is something possible, and if I require nothing but the internal possibility, you would not find it necessary that a body or fire &c. should exist as the *data* to it, for they are cogitable, and that is enough. The accord of the predicate fiery with the subject body according to the principle of contradiction lies in these conceptions themselves, whether they be actual or merely possible things. I grant you that neither body nor fire needs be an actual thing, and yet a fiery body be internally possible. But I proceed to ask, is even a body in itself possible? You, as you must not appeal here to experience, will naturally enumerate the *data* of its possibility, namely, extension, impenetrability, power and who knows what more, and still add that therein there is no internal collision. I grant you all that, but you must give me an account what right you have so directly to assume as a *datum* the conception of extension, for suppose it signifies nothing, your pretended possibility of the body is an illusion. It would be very wrong to appeal to experience on account of this *datum*, for it is at present just the question, whether, though nothing at all should exist, an internal possibility of the fiery body have place. Let us take for granted that at present you cannot any more divide the conception of extension into more simple *data*, in order to show that in it there is nothing clashing, as at last you

must of necessity come to something, whose possibility cannot be dissected, the question then is here, whether space and extension be empty words, or if they denote any thing. Here the want of a contradiction decides nothing; an empty word never denotes any thing contradictory. If space does not exist, or at least is not given by something existing as a consequence, the word space signifies nothing at all. So long as you ascertain the possibilities by the position of contradiction, you rely upon that which is given you cogitable in the thing, and contemplate but the connexion according to this logical rule, but at last, when you consider how this is given you, you never can appeal to any thing else than to an existence.

But we shall wait for the issue of those contemplations. The application itself will render more conceivable a conception which, without bringing ourselves to our wits end, can scarcely be made distinct of itself, as it even treats that, upon which bottoms the cogitable.

CONTEMPLATION THE THIRD.

OF THE ABSOLUTELY NECESSARY EXISTENCE.

1.

conception of the absolutely necessary Existence in general.

Absolutely necessary is that whose contrary is in itself impossible. This is an undoubtedly

ly right nominal exposition. But if I ask, Upon what does it depend, that the nonentity of a thing shall be absolutely impossible? that is what I am looking for, the real exposition, which only can be useful to us for our end. All our conceptions of the internal necessity, in the properties of possible things, of whatever nature they may be, tend to this; namely, that the contrary contradicts itself. But when an absolutely necessary existence is concerned, one would endeavour to understand any thing of it by the same mark with bad success. Existence is no predicate at all, and the nullifying of existence no negation of a predicate, by which something in a thing could be annulled, and an internal contradiction arise. The annulling of an existing thing is a total negation of all that which is absolutely posited by its existence. The logical references between the thing as a possible thing and its predicates remain however. But these are totally different from the absolute position of the thing together with its predicates; as therein consists existence. Accordingly it is not just what is posited in the thing, but something else that is annulled by the nonentity, and herein there is consequently never a contradiction. In the last contemplation of this work all this, in the case, where the absolutely necessary existence was actually meant, will be rendered more convincing by a clear unfolding of this unfitness. The necessity in the predicates of merely possible conceptions may however be named the logical necessity. But that, whose

chief ground I am investigating, namely, that of existence, is the absolute real necessity. I find that what I am absolutely to consider as nothing and impossible, must destroy every thing cogitable. For if there still remained therein something to think of, it were not totally incogitable, and absolutely impossible.

If I reflect a moment why that which contradicts itself is absolutely nothing and impossible, I observe that, as thereby the position of contradiction, the last logical ground of all that is cogitable, is annulled, all possibility vanishes, and nothing is left to think of. I quickly perceive that when I annul all existence in general, and hereby the last real ground of all that is cogitable drops, in like manner all possibility vanishes, and nothing more remains to think of. Therefore something can be absolutely necessary, either when by its contrary the formal of all that is cogitable is annulled, that is, when it contradicts itself, or when its nonentity nullifies the material of all that is cogitable, and all the *data* thereto. The former, as aforementioned, never has place in existence, and as no third is possible, either the conception of the absolutely necessary existence is a very illusory and false conception, or it must rest upon the nonentity of a thing's being at the same time the negation of the *data* of all that is cogitable. That this conception, however, is not a fiction but something true, is obvious from the following:

An absolutely necessary Being existeth.

All possibility presupposes something actual, wherein and whereby all that is cogitable is given. There is therefore a certain actuality, whose annulling would annul even all internal possibility in general. But that, whose annulling or negation destroys all possibility, is absolutely necessary. Consequently there exists of necessity something absolute. So far it is clear that an existence of one or more things forms the basis of even all possibility, and that this existence is in itself necessary. Hence may be easily taken the conception of contingency. According to the nominal exposition contingent is that whose contrary is possible. But in order to find its real exposition, the following mode of distinction must be attended to. In the logical sense that, as a predicate, is contingent in a subject, whose contrary does not contradict it. *Exempli gratia*, it is contingent to a triangle in general that it is rectangular. This contingency has place in the reference of the predicates to their subjects only, and suffers, because existence is no predicate, no application at all to existence. In the real sense, on the other hand, that, whose nonexistence can be thought, *id est*, whose annulling does not annul all that is cogitable, is contingent. If therefore the internal possibility of things does not presuppose a certain existence, this is contingent, as its contrary annuls not the possibility. Or, That existence, whereby

the material to all that is cogitable is not given, without which therefore there is yet something to think of, that is, possible, whose contrary in the real sense is possible, is in the very same sense contingent also.

3.

The necessary Being is One.

As the necessary Being compriseth the last real ground of all other possibility, every other thing is but so far possible as it is given by him as a ground. Therefore every other thing can have place but as a consequence of him, and of course the possibility and existence of all other things are dependent upon him. But any thing which is itself dependent comprises not the last real ground of all possibility, and therefore is not absolutely necessary. Consequently several things cannot be absolutely necessary.

Suppose A is a necessary being, and B another. Thus by means of the exposition, B is but so far possible, as it is given by another ground A, as its consequent. But as by means of the presupposition B itself is necessary, so its possibility is given in it as a predicate, and not as a consequence of another ground, and yet only as a consequence according to the foregoing; which is inconsistent.

4. The

The necessary Being is simple.

That nothing composed of many substances can be an absolutely necessary being is evident from what follows. Let us suppose that there is but one of his parts absolutely necessary, the others collectively are possible by it but as consequences, and belong not to it as collateral parts. Imagine to yourself that several or all of them are necessary, this contradicts the foregoing number. Consequently there remains nothing else than that they must exist every one apart contingently, but all together absolutely necessarily. Now this is impossible, because an aggregate of substances can have no more necessity in the existence, than belongs to the parts, and as none at all belongs to these, but their existence is contingent, that of the whole must likewise be contingent. Should one imagine to be able to rely upon the exposition of the necessary Being, by saying that in every one of his parts are the last *data* of an internal possibility, in all collectively of all that is possible, something totally absurd, only in a concealed manner, would be represented. For if the internal possibility is so imagined, that some parts may be annulled, yet so, that what is given cogitable by the other parts may remain, thus it would need to be represented that it is in itself possible, that the internal possibility may be negated or annulled. But it is totally incogitable and contradictory that something is nothing, and this

signifies that, To annul an internal possibility, is to destroy all that is cogitable, whence is manifest that the *data* to every cogitable must be given in that thing, whose annulling is the contrary of all possibility, that therefore what contains the last ground of an internal possibility: contains it of all possibility in general, by consequence this ground cannot be divided into different substances.

5.

The necessary Being is immutable and eternal.

As even his own and every other possibility presuppose this existence, no other mode of his existence is possible, that is to say, the necessary Being cannot exist in different manners. All that exists is thoroughly determined, as this Being now is possible but because he exists, so no possibility of him has place, except so far as he in fact exists; he is therefore possible in no other way than as he is actual. He consequently cannot be either determined or altered in another manner. His nonexistence is absolutely impossible, of course his origin and dissolution are so likewise, therefore is he eternal.

6. The

6.
The necessary Being comprehendeth the highest Reality.

As the *data* to all possibility must be to be met with in him, either as his designations, or as consequences, which are given by him as the first real ground, it is obvious that all reality is in one way or another comprehended by him. But these very designations, by which this Being is the chief ground of all possible reality, place in him the highest degree of real properties that can ever belong to a thing. As such a Being then is the most real of all possible beings, all others being possible but by him, so this is not to be understood, as if all possible reality belonged to his designations. This is a confounding of conceptions, which has hitherto exceedingly prevailed. All realities are bestowed upon God or the necessary Being without distinction as predicates, without perceiving that they never can possibly have place in one single subject as designations beside one another. The impenetrability of bodies, extension &c., cannot be properties of him, who is possessed of an intellect and of a will. It is but an evasion to endeavour not to hold the above-mentioned qualities true reality. The percussion of a body, or the power of cohesion, is beyond all doubt something really positive. And the pain in the sensations of an animated being is by no means a mere privation. An erroneous thought justified

justified in appearance such a representation. It is said reality never contradicts reality, because both are true affirmations; consequently they collide not with one another in a subject. Though I grant that there is here no logical collision, the real repugnance is not thereby removed. This has always place, when something as a ground annihilates by a real opposition the consequence of something else. The motive power of a body in one direction and the tendence in the same degree in the opposite involve no contradiction. They are actually possible in a body at the same time. But the one annihilates the real consequence of the other and, as otherwise the consequence of each in particular would be an actual motion, it is at present of both together in one subject *o*, that is, the consequence of these opposite powers of motion is rest. Rest, however, is without doubt possible, whence it is evident that the real repugnance is very different from the logical, or contradiction; for, what is consequent thereof is absolutely impossible. But in the most real Being there can be no real repugnance or positive collision of his own designations, as the consequence thereof would be a privation or a want, which is inconsistent with his highest reality, and as, if all realities lay in him as designations, such a collision must arise, they cannot be collectively in him as predicates, therefore, as they are all given by him, they belong to either his designations or his consequences. *ed bonum in se ad bonum*
 At first sight it might appear to follow that,

that, as the necessary Being compriseth the last real ground of all other possibility, the ground of wants and negations of the essence of things must also lie in him; which, were it admitted, might occasion the conclusion, that he himself must have negations among his predicates, and by no means nothing but reality. But let his established conception be considered. In his existence is originally given his own possibility. As there are other possibilities, of which he compriseth the real ground, it follows according to the principle of contradiction that it is not the possibility of the most real Being himself, and hence there must needs be such possibilities as contain negations and wants.

Consequently the possibility of all other things, with regard to what is real in them, rests upon the necessary Being, as a real ground, but the wants, thereupon, because they are other things and not the first Being himself, as a logical ground. The possibility of body, so far as it has extension, powers &c., is grounded in the Chief of all beings; so far as the power of thinking is wanting to it (body), this negation lies in itself, according to the position of contradiction.

Negations in themselves, in fact, are not something, or cogitable; which may be rendered conceivable in the following manner. Lay down nothing but negations, nothing at all is then given, and not any thing to be thought of. Negations are therefore cogitable but by the opposite positions, or rather, positions, which are not the greatest, are possible.

sible. And herein lie according to the proposition of identity the negations themselves. It is evident that all negations inherent in the possibilities of other things presuppose no real ground (as they are nothing positive) therefore only a logical one.

CONTEMPLATION THE FOURTH.

ARGUMENT FOR A DEMONSTRATION OF THE EXISTENCE OF GOD.

1.

The necessary Being is a Spirit.

It was proved above that the necessary Being is a simple substance, as also that not only all other reality is given by him as a ground, but that the greatest possible reality, which can be comprised in a being as a designation, is inherent in him. Now different proofs can be given that to him appertain the properties of understanding and of will. For in the first place, both are true realities and both may consist with the greatest possible reality in one thing; which latter, though it cannot properly speaking be brought to that distinctness, which logically perfect proofs require, one is compelled to grant by an immediate judgment of understanding.

Secondly, the properties of a spirit, intellect and will, are of that nature, that we
can

can conceive no reality, which could sufficiently make amends for the want of them. And as these properties are those which are capable of the highest degree of reality, and also belong to the possible ones, so must be possible in others by the necessary Being, as a ground, understanding and will, and all reality of the spiritual nature, which would not however be met with as a designation in him. Therefore the consequence would be greater than even the ground. For it is certain that, if the Supreme Being hath not intellect and a will, every other, who is posited, through him, with these properties, though he is dependent, and has many other wants, of power &c., must relatively to these properties outdo him in the highest degree in reality. But, as the consequence cannot surpass the ground, the necessary simple Substance must be endowed with intellect and a will as properties, that is, he is a Spirit.

Thirdly, order, beauty, perfection in all that is possible, presupposes a Being in whose properties these references are either grounded, or at least by whose essence the things are possible conformably to these references as from a chief ground. Now the necessary Being is the sufficient real ground of every thing else that is possible without him, consequently that property, by which conformably to these references all without him can become actual, is to be met with. But it seems that the ground of the external possibility, unless a will conformable to the understanding be presupposed, is not sufficient to order, beauty and

and perfection. These properties must therefore be attributed to the Supreme Being.

Every body knows, that, notwithstanding all the grounds of the production of plants and trees, regular flower-gardens, avenues &c., are not possible but by an understanding that designs, and a will that executes them. All potency, all productive or plastic power, as also all other *data* to possibility without an understanding, are insufficient to render complete the possibility of such order.

From one of the grounds here alleged, or from them collectively, may be deduced the proof that the Necessary Being hath a will and understanding, by consequence must be a Spirit. I shall content myself with merely rendering the argument complete. It is not my intention to offer a formal demonstration.

2.

There is a God.

Something absolutely necessary exists. This is one in its essence, simple in its substance, a spirit according to its nature, eternal in its duration, immutable in its quality, all-sufficient relatively to all that is possible and actual. There is a God. I here give no determinate exposition of the conception of God. I would need to do this, if I had a mind to contemplate my object systematically. What I here exhibit is but the analysis, by which one may qualify himself for the formal doctrine.

trine. Meanwhile let the exposition of the conception of God be ordered as one thinks fit, I am certain that that Being, whose existence we have but just now evinced, is that Divine Being, whose distinctive sign will in one way or another be reduced to the shortest denomination.

3.

Observation.

As nothing more appears from the third contemplation, than that all reality must be given, either in the necessary Being as a designation, or by him as a ground, till then it must remain undetermined, whether the properties of understanding and of the will are to be met with in the Supreme Being as his designations, or if they are to be considered as merely consequences of other things through him. Were the latter, his nature would, notwithstanding all the excellencies of this first Being, which are evident from the sufficiency, unity and independence of his existence as a great ground, be far inferiour to that which one must conceive, when he thinks of a God. For without cognition and resolution he would be a blind necessary ground of other things, and even of other spirits, and be distinguished in nothing from the eternal fate of a few ancients, but in being more comprehensibly described. This is the reason why in every system particular attention must be paid to this circumstance, and why we could not omit it.

In the whole connexion of all hitherto propounded grounds belonging to my proof I have nowhere used the word perfection. Not as if I held all reality as much as all perfection, or that the greatest agreement to one constitutes it. I have weighty reasons to differ very much from this judgment of many others. After having made long and careful investigations concerning the conception of perfection both in general and in particular, I have learned that in a more exact knowledge of it there lies a great deal concealed, which can enlighten the nature of a spirit, of our own feeling, and even the first conceptions of practical philosophy.

I perceive that the word perfection in a few cases suffers, according to the insecurity of every language, degenerations from the proper sense, which deviate pretty far, but that it, in the signification, to which every body chiefly attends, even in those aberrations, always presupposes a reference to a being, which has cognition and appetition. As it would have been far too diffuse to pursue the argument for God and for his reality to this reference, though by means of what lays the foundation it had indeed been very practicable, I have not found it agreeable to the design of this disquisition by including this conception to give occasion to launch out into too great a prolixity.

4.

Conclusion.

After the proofs already given every one may very easily add so obvious consequences, as are the following: I, who conceive I, am not so absolutely necessary a being, for I am not the ground of all reality, I am variable: No other being, whose nonexistence is possible, that is, whose annulling does not at the same time annul all possibility, no variable thing, or in which there are limits, consequently the world is not of such a nature: The world is not an accident of the Deity, because in it are met with collision, want, mutability, all contraries to the designations of a Divinity: God is not the sole substance that exists there, and all other substances there are but dependent upon him &c.

I shall add but a few words. The argument for the existence of God, which we adduce, is built upon something's being possible only. Consequently it is a proof that can be given perfectly *à priori*. Neither my existence, nor that of other spirits, nor that of the corporeal world is presupposed. It is in fact taken from the internal criterion of absolute necessity. The existence of this Being is cognised in this manner from what actually constitutes his absolute necessity, therefore quite genetically.

All proofs that might otherwise be given of the existence of this Being as a cause from his effects; suppose they proved ever so strictly, as they do not, never can render the nature

of this necessity comprehensible. Merely because something exists of absolute necessity, is it possible that something is a first cause of other things, but of something's being a first, *id est*, independent, cause, is a consequence but that when the effects exist, it must likewise exist, but not that it exists in an absolutely necessary manner.

As it is farther evident from the recommended argument that all the essence of other things and the real of all possibility are grounded in this one Being, in which is to be met with the greatest degree of understanding and of a will, which is the greatest possible ground, and as in such a one all must be in the greatest possible consension, it may be previously gathered, that, as a will always presupposes the internal possibility of the thing itself, the ground of possibility, that is, the essence of God is in the greatest concord with his will, not as if God were by his will the ground of the internal possibility, but because the very same infinite nature, which has the reference of a ground to all the essences of things, has at the same time the reference of the highest desire to the greatest consequences thereby given, and the latter can be fruitful by the presupposition of the former only. Consequently the possibility of the things themselves that are given by the Divine nature agree with his great desire. But in this agreement consist goodness and perfection. And as they accord with one, even in the possibilities of things is to be met with unity, harmony and order.

But

But if we perceive by a mature judgment of the essential properties of things, which are known to us by experience, even in the necessary designations of their internal possibility a unity in the multifarious, and consonance in the separated, we may conclude back on one single principle of all possibility by the way of cognition *à posteriori*, and find ourselves at last at the fundamental conception of the absolutely necessary existence, from which we first set out by the way of cognition *à priori*. Our design shall now be directed to see, whether in even the internal possibility of things there are to be met with a necessary reference to order and harmony, and unity in this immense multifarious, in order that we may be able to judge, whether the essences of things themselves agnize a chief common ground.

SECTION II.
OF THE GREAT ADVANTAGE PECULIAR TO
THIS MODE OF PROOF IN PARTICULAR.

CONTEMPLATION THE FIRST.
WHEREIN FROM THE PERCEIVED UNITY IN
THE ESSENCES OF THINGS THE EXISTENCE
OF GOD IS CONCLUDED A POSTERIORI.

1.

*The Unity in the Multifarious of the Essences
of Things evinced by the Properties of
Space.*

The necessary designations of space afford the geometrician no common pleasure, not only by the evidence in the conviction and the exactness in the execution, but by the extensive compass of application, and the whole human cognition has nothing to exhibit that approaches, much less surpasses it. But I am at present to contemplate the same object in a very different point of view. I consider it with a philosophic eye, and perceive that

that in so necessary designations order and harmony prevail, and in a prodigious multifarious congruity and unity. For instance, I have a mind that a space shall be bounded by the motion of a straight line round a fixed point. I comprehend very easily that I thereby describe a circle, which in all its points is at equal distances from the aforesaid fixed point. But I find no occasion at all by a construction so simple to presume much multifarious, which is just thereby subjected to great rules of order. Meanwhile I discover that all straight lines, which, drawn from any point at pleasure within the circle, cross one another and touch the circumference, are always cut in geometrical proportion; as also that all those, which, drawn from a point without the circle, intersect it, are always cut into such parts, as are in the inverse ratio to their whole. When one considers how many different situations these lines may assume, by intersecting the circle as abovementioned, and perceives how they constantly rank under the same laws, from which they cannot deviate, it is, notwithstanding that its truth is easily comprehended, something unexpected that so little preparation in the describing of this figure, and yet so much order, and in the multifarious a unity so perfect follow therefrom.

Were it proposed That oblique planes in different inclinations towards the horizon, yet arranged of such a length, that free rolling bodies might arrive at the bottom directly at the same time, every body that understands

the mechanical laws perspects that to this belong various preparations. But these arrangements are to be found in the circle of itself with great variation of the situations, and yet in every case with the greatest justness. For the chords that touch the vertical diameter, whether they proceed from its uppermost or undermost point, according to any inclinations one pleases, have collectively this in common, that the free fall through them happens in equal times. I remember that an intelligent youth, to whom I demonstrated this proposition, when he understood every thing well, was thereby no less struck, than if it had been a miracle. And in fact one is surprised by so strange a union of the multifarious according to such fertile rules in a thing appearing so common and simple as is a circle, and justly filled with admiration. There is no wonder of nature which, by the beauty or the order that prevails therein, gives more cause for astonishment, it must then have happened because the reason of it is not to be perspected so distinctly, and admiration is a daughter of ignorance.

The field upon which I collect memorable things is so full of them, that, without going a step farther, innumerable beauties present themselves on the very spot where we are. There are solutions of geometry, where that, which seems to be possible but by extensive preparations, exhibits itself as it were without any art in the thing itself. These are found curious by every body, and this the more, the less one has to do with them, and the

the more entangled the solution seems to be. The circular ring betwixt two circles, which have a common centre, has a figure very different from a circular surface, and it appears at first difficult and artful to every body, to transform it into this figure. But as soon as I perspect that the line touching the internal circle drawn so far, till it cuts on both sides the periphery of the greater, is the diameter of this circle, whose surface is directly equal to the contents of the circular ring, I cannot but express some surprise at the simple mode, in which the *quaesitum* manifests itself so easily in the nature of the thing itself, and in this there is almost nothing to be attributed to my labour.

In order to remark in the different properties of space unity in the greatest variety and connexion in what seems to have a necessity quite separate from the other, we have cast an eye but to the circle, which has yet innumerable properties, of which a small part only is known. Hence may be concluded what immensity of such harmonical references, of which the higher geometry exposes many to view in the relations of the different species of curves, lies besides in the properties of space, and all, besides the exercise of the understanding by their cogitable introspection, move the feeling in a similar or rather more sublime manner than the contingent beauties of nature.

If in such dispositions of nature one is entitled to inquire after a ground of so very extensive a consension of the multifarious, must

one be less so in perceiving the symmetry and the unity in the infinitely manifold designations of space. Is this harmony less surprising because it is necessary? I hold it on that account but the more so. And as that many, of which every one has its particular and independent necessity, never could have order, consistence and unity in the reciprocal references, is not one thereby led just as well, as by the harmony in the casual preparations of nature, to the presumption of a Chief Ground even of the essences of things, as the unity of the ground occasions unity likewise in the circuit of all the consequences?

2.

*The Unity in the Multifarious of the Essence
of Things evinced in what is necessary in
the Laws of Motion.*

When there is discovered in nature an order, which seems to be designed on account of a particular end, as it would not have presented itself merely according to the universal properties of matter, we consider this disposition as contingent, and as the consequence of a choice. If new agreement, order and use, and particularly middle causes thereto adjusted show themselves, we judge them in the same manner; this connexion is quite foreign to the nature of things, and they stand in this harmony, merely because it has pleased some one so to connect them. No universal
cause

cause can be given, why the claws of the cat, of the lion &c. are so formed as to be sheathed, as if some author had so designed them, in order to be secured from wearing away, as these animals must have suitable instruments to seize and to hold fast their prey. But when certain more general qualities inherent in matter besides any advantage they yield, and on whose account it may be represented that they were so ordered, show, without the smallest new preparation, a peculiar fitness for still more consension, when a simple law, which every body will find necessary for the sake of a certain good only, yet shows an extensive fertility in many other things, when other advantages and consistencies flow from it without art, or rather of necessity, when finally this is found throughout the whole material nature, thorough references to unity and to connexion manifestly lie in even the essences of things, and an universal harmony diffuses itself over the very kingdom of possibility. This occasions an admiration at so much fitness or natural congruity which, as it renders the painful and forced art unnecessary, never can itself be attributed to chance, but points out a unity lying in the possibilities themselves and the common dependence of even the essences of things upon a Single Great Ground. I shall by a few easy examples endeavour to render this very great curiosity distinct, by carefully following the method, to ascend from what is immediately certain by observation to the more general judgment.

One

One reason among a thousand may' be chosen, why an atmosphere may be considered as necessary, if it is absolutely required to have an end as a ground, whereby a disposition in nature was first occasioned. This I grant, and name the respiration of men and animals as the ultimate purpose of this disposition. Now this atmosphere by the same properties and no more than are requisite to respiration only produces an infinity of beautiful consequences, which happen of necessity and need not be promoted by peculiar predispositions. The very same elastic power and gravity of the air render suction possible, without which young animals must want nourishment, and the possibility of the pump is a necessary consequence of them. By them it happens that humidity rises from the great reservoirs of water in exhalations or vapours, which are condensed into clouds that embellish the day, frequently mitigate the excessive heat of the sun, but chiefly serve to moisten the arid regions of the earth. The twilight, which lengthens the day, and by imperceptibly intervening degrees renders the transition from night to day innocuous to the eye, and principally the winds are quite natural consequents of them. - Let us suppose that a person should project a design, how the coasts of the warm climates, which are necessarily warmer than the inlands, could enjoy a somewhat more supportable heat, a sea-breeze, which for this purpose must blow during the hottest part of the day, would the most naturally occur to him. But, as during
the

the night it grows much sooner cold at sea than upon the land, it might not be good that the same wind should constantly blow, he would wish that it had pleased Providence so to order it, that in the middle of the night the wind should return from the land, which might also serve for other purposes. The question now would be, but by what mechanism and artificial arrangement this regular change of wind could be maintained, and in this there would be great reason to apprehend that, as man cannot require that all the laws of nature shall be suited to his convenience, this mean might indeed be possible, but so incongruous with the other necessary dispositions, that the Supreme Wisdom would not find it good to order it. All this deliberation, however, is unnecessary. What a disposition chosen on reflection would do, the air performs here according to the universal laws of motion, and the very same simple principle of its other usefulness produces these likewise without new and particular dispositions. The air rarified by the heat of the day upon the burning ground of such a country necessarily yields to the denser and heavier upon the cool sea, and occasions the seabreeze, which on that account blows from the hottest hours of the day till late in the evening, and the sea-air, which from the same causes was not so much heated during the day, as that upon the land, cools quicker at night, contracts itself, and occasions the return of the land-air at night. Every body knows that all the coasts of the torrid zone enjoy this vicissitude of wind.

In

In order to show the references, which simple and universal laws of motion have to order and consistence by the necessity of their being, I have cast my eye on but a small part of nature, on the effects of the air. It may be easily perceived that the whole immense tract of the great order of nature lies open before me in the very same respect. I reserve something still to be added to the enlarging of this beautiful prospect in what follows. At present however I would neglect something very essential, did I not consider the weighty discovery which Maupertuis made relatively to the consistency of the necessary and universal laws of motion.

What we have adduced as a proof concerns, it is true, very extensive and necessary laws, but only of a particular sort of substances of the world. Maupertuis, on the contrary, proved that even the most general laws by which nature acts, as well in the equilibrium as in the stroke or percussion, the elastic as well as the nonelastic bodies, in the attraction of light as well in its refraction, as its repulsion in the repercussion, are subjected to a predominant rule, according to which the greatest frugality is always observed in the action. By this discovery the effects of matter are, notwithstanding the great difference there may be in themselves, brought under a universal formule, which expresses a reference to good grace or becomingness, beauty and consistency. The laws of motion themselves, however, are of such a nature as never to allow matter to be conceived without them,
and

and they are so necessary, that without the smallest experiment they may be derived with the greatest clearness from the universal and essential quality of all matter. This no less acute than learned man soon found, that, as in the infinite multifarious of the universe unity is thereby occasioned, and in the blind necessary, order, there must be some one chief principle, from which all this can derive its harmony and good-grace. He believed with reason that as so universal coherence in the simplest natures of things furnishes a more apposite ground to meet with certainty the last cause of every thing in the world in some one perfect first Being, than all perception of different contingent and variable order according to particular laws. The question now was, what use the higher philosophy could make of this weighty new introspection, and I believe not to conjecture wrong, when I hold that the design of the question, for the answer to which the Royal Academy of Sciences in Berlin awarded a premium, was, Whether the laws of motion are necessary or contingent, but which nobody answered agreeably to expectation.

If the contingency is taken in the real sense, that it consists in the dependence of the material of possibility on another material, it is evident that the laws of motion and the universal properties of matter, which obey them, must depend upon some one great common first Being the ground of order and consistency. For who would hold that in an extensive multifarious, wherein every single one has its own
fully

fully independent nature, by a strange chance every thing should be so exactly suited, as to be consonant to one another and on the whole unity result. But, that this common principle must not refer to the existence of this matter merely and to the properties communicated to it, but even to the possibility of matter in general and to being itself, is perfectly obvious, because that which is to fill a space, what is to be capable of the motion of percussion and of gravitation, cannot at all be conceived on other conditions, than are those, whence the abovenamed laws of necessity flow. In this manner may it be well perspected that the motive laws of *matter* are absolutely necessary, that is, when the possibility of matter is presupposed, it is contradictory to it to act according to other laws, which is a logical necessity of the highest sort: that however the internal possibility of matter itself, namely, the *data* and the real upon which this cogitable bottom, is not given independently or of itself, but is posited by some one principle, in which the multifarious receives unity, and the distinct, connexion; which evinces the contingency of the laws of motion in the real sense.

CONTEMPLATION THE SECOND.

DISTINCTION OF THE DEPENDENCE OF ALL THINGS UPON GOD BY THE MORAL AND THE NOT MORAL.

That dependence of a thing upon God, as he is a ground of it by his will, I name *moral*, but

but every thing else is *not moral*. If therefore I maintain that God containeth the last ground itself of the internal possibility of things, every body easily understands that this dependence can be but not moral; for the will makes nothing possible, but resolves upon that only which is already presupposed as possible. So far as God comprehendeth the ground of the existence of things, I grant that this dependence is always moral, that is, that they exist, because he hath willed that they should be.

The internal possibility of things presents to him who determined its existence materials, which comprise an uncommon fitness for consension, and a congruity, lying in their essence, to a whole beautiful and orderly in a manifold manner. That there is an atmosphere may because of the ends to be thereby attained be attributed to God as a moral ground. But, that so great a fertility lies in the essence of a single and so simple ground, so much fitness and harmony lying in its possibility, which require not new arrangements, in order to be suitable to other possible things conformably to the various rules of order of a world, certainly cannot, on the other hand, be attributed to a free choice: because all resolution of a will presupposes the cognition of the possibility of what is to be resolved on.

All that, whose ground must be sought in a free choice, must so far be contingent. Now the union of many and various consequences, which of necessity flow from one ground, is not a contingent union; therefore this cannot

be ascribed to a voluntary determination. We have already seen that the possibility of the pump, of respiration, of the raising of fluid matter into vapours, of winds &c., are inseparable from one another, because they all depend upon one ground, the elasticity and gravity of the air, hence this agreement of the multifarious in one is by no means contingent, and consequently not to be attributed to a moral ground.

I proceed here but on the reference, which the essence of the air, or of every other thing has to the *possible* producing of so many beautiful consequences, that is, I contemplate but the *fitness* of their nature for so many ends, and there the unity, on account of the consension of a single ground with so many possible consequences, is certainty necessary, and these possible consequences are so far inseparable from one another and from the thing itself. As to the actual producing of this use, it is so far contingent, as one of the things, to which the thing refers, is wanting, or a foreign power can impede the effect.

In the properties of space lie beautiful relations, and in the immensurable multifarious of its determinations an admirable unity. The existence of all this consistency, so far as matter must fill space, is, together with all its consequences, to be attributed to the arbitrement of the First Cause; but with regard to the uniting of so many consequences with one another, which are all in so great harmony with the things in the world, it would be absurd to seek them again in a will. Among
other

other necessary consequences of the nature of the air is to be numbered that, by which resistance is made to the substances therein moved. The drops of rain, when they fall from a great height, are stopped by it, and descend with a moderate velocity, as without this retardation they would acquire a very destructive power in falling from such a height. This is an advantage which, as without it the air is not possible, is not conjoined with its other properties by a particular decree. The cohesion of the parts of matter may, for instance, in water, be a necessary consequence of the possibility of matter in general, or a particularly arranged order, the immediate consequence thereof is the circular figure of small parts of it, as drops of rain. Thereby however is possible according to very general laws of motion the beautifully variegated rainbow, which, when the sun beams through the falling drops of rain, stands above the horizon with a moving magnificence and regularity. That fluid matter and heavy bodies exist, can be attributed but to the desire of this mighty Author, but that a cosnical body in its fluid state endeavours to assume in a quite necessary manner in consequence of so universal laws a globular form, which afterwards harmonizes better with the other ends of the universe than any other possible form, as such a surface is susceptible of, the most uniform division of light, lies in the essence of the thing itself.

The cohesion of matter, and the resistance, which the parts conjoin with their separability

lity, render friction, that is of so much use, necessary, and accord as well with the order in all the various alterations of nature, as any thing that has not flown from so universal grounds, but is superadded by a particular preparation. If friction did not retard the motions, the preserving of the powers once produced would, by the communication to others, the repercussion and continual impulsion and concussions, throw all at last into confusion. The surfaces, upon which bodies lie, would always need to be perfectly horizontal, (which they can be but seldom) otherwise these would always slip. All twisted cords hold only by friction. For the threads, which are not of the whole length of the cord, would be drawn from one another with the smallest force, did not that of the friction conformable to the force, by which they are pressed upon one another by the twisting, keep them back.

I here produce so little regarded and common consequences of the most simple and most general laws of nature, in order that as well the great and infinitely extended agreement, which the essence of things in general have among one another, and the great consequences that are to be ascribed to them, where one is not skilled enough to reduce many a disposition of nature to such simple and universal grounds, as in order that the nonsensicalness that lies therein may, when in such consensions the wisdom of God is said to be their particular ground, be perceived. That things which have so many beautiful
references

references exist, is to be attributed to the wise choice of him who produced them on account of this harmony, but that every one of them comprises a so extensive fitness for manifold consónancies by simple grounds, and thereby an admirable unity can on the whole be obtained, lie in the possibility of the things themselves, and as here the contingent, which in every choice must be pre-supposed, vanishes, the ground of this unity may indeed be sought in a wise Being, but not by means of his wisdom.

CONTEMPLATION THE THIRD.

OF THE DEPENDENCE OF THE THINGS UPON
GOD BY MEANS OF THE ORDER OF NATURE,
OR WITHOUT IT.

1.

*Division of the Events of the World, so far
as they rank under the Order of Nature,
or not.*

Something ranks under the order of nature, provided that either its existence or its alteration be sufficiently grounded in the powers of nature. Hereto is required, first, that the power of nature be the efficient cause of it; secondly, that the manner how it is directed to the production of this effect be sufficiently grounded in a rule of the natural laws of effect. Such events are named *natural*

events of the world merely. Whereas where this is not, the case that does not rank under such a ground is something supernatural, and this finds place, either so far as the nearest efficient cause is without nature, that is, provided the divine power produce it immediately, or secondly, if the mode, in which the powers of nature are directed to this case, is but not contained under a rule of nature. In the first case I term the event *materialiter*, in the second *formaliter*, supernatural. As only the latter case, the former being clear of itself, seems to require some illustration, I shall adduce examples of it. There are many powers in nature which have the faculty to destroy single men, states, or even the whole human race. Earthquakes, storms or tempests, comets &c. It is sufficiently founded in the constitution of nature according to an universal law that one of these shall now and then happen. But the vices and the moral corruption of the human species are no *natural* grounds at all that are in conjunction with the laws according to which it takes place. The crimes of a city have no influence on the hidden fire of the earth, and the luxuries of the first ages belonged not to the efficient causes, which could draw down upon them the planets from their orbits. And when such a case happens, it is attributed to a natural law, which signifies that it is a misfortune, but not a punishment, the moral conduct of men can be no ground of an earthquake according to a natural law, because no connexion of causes and effects has here place

place. When an earthquake lays waste Port Royal in Jamaica,* he, who names this a natural event, means that, though the vices of the inhabitants, according to the testimony of their preachers, well merited such a devastation as a judgment, this case is to be considered as one of many cases, which sometimes happens according to a universal law of nature, as regions of the earth, and with these sometimes cities, and among these now and then very wicked cities are thus shaken. But, on the contrary, if it is to be considered as a punishment, these powers of nature, as they cannot have connexion with the conduct of men according to a natural law, must be particularly directed in every such single case by the Supreme Being; then however is the event, though the middle cause is a power of nature, in the formal sense supernatural. And if by a long series of preparations particularly placed in the active powers of the world this event should at last come to pass, though it were supposed that God had made all the necessary dispositions in the creation that it should afterwards take place at the proper time by the powers directed thereto in nature, (as this may be conceived from Wiston's theory of the flood, so far as it proceeds from a comet,) the supernatural is thereby not at all diminished, but only removed to the creation, and by that means inexpressibly augmented. For this whole continuance of the

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* See Ray on the beginning, alteration and dissolution of the world.

series, so far as the mode of its disposition refers to the issue, as it is by no means to be considered with regard to it as a consequence of universal laws of nature, shows an immediate still greater divine care, which is directed to a so long chain of consequences, in order to avoid the impediments, which could occasion to miss the exact attainment of the sought effect.

Whereas there are rewards and punishments according to the order of nature, because the moral conduct of men stands in connexion with them according to the laws of causes and effects. Wild voluptuousness and intemperance end in a life of sickness and torment. Tricks and cunning fail at last, and honesty is ultimately the only policy. In all this the connexion of the consequences happens according to the laws of nature. But whatever number of those rewards, or punishments, or of any other events of the world there may be, the direction of the powers of nature to every single case must have always taken place in an extraordinary manner; though a certain uniformity prevails among many of them, they are subordinated to an immediate Divine law, to that of Divine wisdom, but to no law of nature.

2.

Division of the natural Events, so far as they rank under either the necessary, or the contingent Order of Nature.

All things of nature are contingent in their existence. The connexion of various sorts
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of things, for instance, earth, air, water, is no doubt contingent, and so far to be attributed to the arbitrement of the Supreme Author merely. But though the laws of nature seem so far to have no necessity, as the things themselves, as also connexions wherein they can be exercised, are contingent, there remains a species of necessity which is very remarkable. There are many laws of nature, whose unity is necessary, that is, where the very same ground of agreement with one law renders other laws necessary. For example, the very same elastic power and gravity of the air are of necessity at the same time a ground of the possibility of the pump, of the possibility of clouds to be generated, of the maintenance of fire, of winds &c. It is necessary that, as soon as a ground exists but for a single one of them, the ground shall be met with for the others. On the other hand, when the ground of a certain sort of similar effects according to a law is not at the same time the ground of another sort of effects according to another law in the same being, the union of these laws is contingent or there prevails in these laws contingent unity, and what falls out afterwards in the thing, happens according to a contingent order of nature. Man sees, hears, smells, tastes &c., but the very same properties, which are the grounds of seeing, are not those of tasting. He must have other organs for hearing, than for smelling. The union of faculties so different is casual and, as it tends to perfection, artificial. In every organ there is artificial unity.

In the eye there is a part, which allows the entrance of light, another that refracts it, and still another which receives the image. Whereas they are not different causes, that give the globular form to the earth, that keep back the bodies on the earth against the circumgyration, that preserve the motion of the moon, but gravitation is the only cause, which of necessity suffices to all these. Now it is beyond a doubt a perfection that for all these effects grounds are to be met with in nature, and if the same ground, which determines the one, is also sufficient for the others, the more unity thereby accrues to the whole. But this unity and with it the perfection are in the case here adduced necessary and cleave to the essence of things, and all consistence, fruitfulness and beauty, which are so far owed to it, depend, by means of the essential order of nature, or by means of that which is necessary in the order of nature, upon God. I hope I shall be understood that I would not have this necessity extended to the existence of these things themselves, but only to the consension and unity lying in their possibility, as a necessary ground of a so very great fitness and fertility. The creatures of both the animal and vegetable kingdom present every where the most admirable examples of a unity contingent indeed, but harmonizing with great wisdom. Vessels which suck in sap, vessels that inhale, those which elaborate the juice, and those that exhale it &c., a great multifarious, every single one of which has no fitness for the effects of the other

other, and where their union to the whole perfection is artificial, so that the plant itself with its references to so different ends constitutes a contingent and arbitrable one.

Whereas unorganized nature chiefly gives an inexpressible number of proofs of a necessary unity in the reference of a simple ground to many fit consequences, insomuch that one is inclined to presume that perhaps it may, where even in organized nature much perfection may at bottom seem to have its peculiar disposition, be a necessary consequence of the very same ground, which in its essential fertility with many other beautiful effects connects it, so that even in these kingdoms of nature there may be more necessary unity than one is well aware of. As now the powers of nature and their laws of action contain the ground of an order of nature which, so far as it comprehends manifold harmony in a necessary unity, occasions that the connexion of much perfection in one ground becomes a law, so one has to contemplate different effects of nature with regard to their beauty and usefulness under the essential order of nature and by means of it under God. As on the other hand, much perfection in a whole is not possible by the fruitfulness of a single ground, but requires different grounds arbitrarily united with this view, so, much artificial order is the cause of a law, and the effects, which happen accordingly, range under the contingent and artificial order of nature, but by means of it under God.

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CONTEMPLATION THE FOURTH.

THE USE OF OUR ARGUMENT IN THE JUDGING
OF THE PERFECTION OF A WORLD ACCORDING
TO THE COURSE OF NATURE.

1.

*What can be concluded from our Argument
to the Preference of the Order of Nature
above the Supernatural.*

It is a known rule of philosophers, or rather of sound reason in general, That without the most important reason nothing shall be holden a miracle, or a supernatural event. This rule contains, first, that miracles are rare, secondly, that the whole perfection of the universe is attained according to the laws of nature conformably to the Divine will without much supernatural influence: for every body cognises That, if without many miracles the world should miss the end of its existence, supernatural events would need to be common. Some are of the opinion, that the formal of the natural connexion of the consequences with their grounds is in itself a perfection, to which perhaps would need to be postponed a better consequent, were it not to be otherwise obtained than in a supernatural manner. They place in the natural as such immediately a preference, because all that is supernatural seems to them as an interruption of an order in itself to cause a deformity. However this difficulty is but imaginary.

imaginary. The good lies only in compassing the end, and is ascribed to the means but on its account. The natural order, when according to it there are not perfect consequences, has immediately no ground of a preference in itself, as it can be considered only as a sort of a mean, which allows no proper estimation, but only one borrowed from the greatness of the end thereby attained. The representation of the trouble, which men find in their immediate performances, secretly mingles itself herewith, and gives a preference to what can be trusted to other powers, even where in the issue something of the use aimed at is missed. If however one who lays the wood on a sawmill could just as well, without greater trouble, immediately transform it into deals, all the art of this machine, as its whole value consists only in that of being a mean to this end, were but a plaything. Consequently something is not good, because it happens according to the course of nature, but the course of nature is good provided that which flows therefrom be good. And as God comprised in his decree a world, in which every thing for the most part by a natural coherence fulfils the rule of the good; so he favoured it with his choice, not because there is therein, a natural coherence that the good is found, but because by this natural coherence without many wonders the perfect ends are the most exactly accomplished.

And now occurs the question, How does it come to pass that the universal laws of nature

ture correspond so beautifully to the will of the Supreme, in the course of the events of the world which happen according to them, and what ground has one to ascribe to them this fitness, that secret supernatural expedients, which incessantly supply their defects, must not be more frequently granted than they are perceived? * Here our conception of the dependence of even the essence of all things on God is of a more extensive advantage, than that which is expected from this question. The things of nature, even in the most necessary determinations of their internal possibility, bear the mark of their dependence on that Being in himself, in whom every thing accords with the properties of wisdom and goodness. From them (the things of nature) may be expected harmony, a beautiful connexion, and a necessary unity in the various advantageous references that a single ground has to many fit laws. It is not necessary that where nature acts according to necessary laws immediate Divine reparations should intervene, because, so far as the consequences are necessary according to the order of nature, nothing that is disagreeable to God can ever fall out even

* This question is by no means sufficiently answered, by appealing to the wise choice of God, which arranged the course of nature so well at once, that frequent reparations are unnecessary. For the greatest difficulty consists in this, how it could have been possible to unite so great perfection in a conjunction of mundane events according to universal laws, chiefly when the multitude of natural things and the immensely long series of their alterations are contemplated, how according to universal rules of their reciprocal efficacy a harmony, which does not stand in need of a more frequent supernatural influence, could have arisen.

even according to the most general laws. For how should the consequences of things, whose casual connexion depends on the will of God, but their essential references as the grounds of the necessary in the order of nature proceed from that in God, which is in the greatest harmony with his attributes in general, how can these, I say, be contrary to his will? And thus must all the alterations of the world, which are mechanical, consequently from the laws of motion necessary, always be good, because they are naturally necessary, and it is to be expected that the consequence is unimprovable, as soon as it is infallible according to the order of nature.* But in order to obviate all misunderstanding, I observe that the alterations in the world are either necessary from the first order of the universe and the universal and particular laws of nature, such as is all that, which happens mechanically in the corporeal world, or that they have in all this a contingency not sufficiently comprehended, like the actions from liberty, whose nature is not sufficiently perspected. The latter species of the alterations of the world, as far as it appears to have in-

* If it is a necessary end of nature, as Newton imagines, that a cosmical system, like that of our sun, shall finally attain a full stop and universal rest, I would not add with him That it is necessary that God shall re-establish it by a miracle. For, as it is a consequence, to which nature according to its essential laws is of necessity determined, I presume that it is also good. This ought not to seem to us a grievous loss, for we know not what immensity plastic nature continually has in other celestial regions, in order by great fruitfulness to repair fully elsewhere this decay of the universe.

in itself a licentiousness with regard to determining grounds and necessary laws, contains so far a possibility in itself to vary from the universal tendency of the things of nature to perfection. And it may on that account be expected that supernatural complements may be necessary, as it is possible that in this consideration the course of nature may be sometimes in collision with the will of God. However, as even the powers of free agents in connexion with the rest of the universe are not totally deprived of all laws, but always subjected though not to necessitating grounds, to such as render certain in another manner the exercise according to the rules of the arbitrement; so is the universal dependence of the essence of things upon God always a great ground here to perspect in the main as fit and conformable to the rule of the good the consequences, which are produced, even among this sort of things, according to the course of nature, (without the seeming deviations in single cases needing to lead us astray); so that the order of nature stands but seldom in need of an immediate supernatural amendment or complement, as the revelation of it makes mention but relatively to certain times and to certain nations. Experience too agrees with this dependence of even the freest actions upon a great natural rule. For how casual soever the resolution to marrying may be, it is found in the same country that, when great numbers are taken, the proportion of marriages to the number of the living is pretty constant, and that, for instance, among 10 persons of both

both sexes there is a married couple. Every body knows how much the liberty of men contributes either to the lengthening or to the shortening of life. Even these free actions, however, must be subjected to a great order; as, one with another, when great multitudes are taken, the number of the dying always bears the very same proportion towards the living. These few proofs may suffice to render in some measure intelligible that even the laws of liberty carry with them no such licentiousness with respect to the rules of an universal order of nature that the very same ground, which in the rest of nature establishes in the essence of things itself an infallible reference to perfection and consistency, should not also occasion in the natural course of the free conduct a greater bent, at least, towards a complacency of the Supreme Being without manifold miracles. But my attention is directed more to the course of the alterations of nature, so far as they are necessary by implanted laws. Miracles in such an order are either not at all or but seldom necessary, because it cannot be meet that there should naturally be such defects as stand in need of them.

If I formed to myself the conception of the things of nature, which one commonly has of them, That their internal possibility is of itself independent and without a foreign ground, I should not at all be surprised, were it said that a world of any perfection is without many supernatural effects impossible. I should rather find it strange and incompre-

Vol. II.

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hensible,

hensible, how without a constant series of miracles any thing good in it could be performed by a natural great connexion. For it would be a strange chance, if the essences of things, every one of which having its separate necessity, should so suit one another, that even the Supreme Wisdom could unite from them a great whole, in which is evident, notwithstanding so manifold dependence, unimprovable harmony and beauty according to universal laws. As, on the other hand, I am instructed that, only because there is a God, something else is possible, so I expect even from the possibilities of things a consonance conformable to their great Principle, and a fitness by universal dispositions to be congruous to a whole, that harmonize properly with the wisdom of the same Being, from whom they borrow their ground, and I find it even wondrous that, so far as something happens, or would happen, according to the course of nature, agreeably to universal laws, it should be disagreeable to God and stand in need of a miracle for reparation, and when it comes to pass, even the occasion of it pertains to the things which sometimes take place, but can never be comprehended by us.

It may be easily understood that, when the essential ground, why miracles can be seldom necessary to the perfection of the world, is perspected, this is valid of those too, which in the foregoing contemplation we named supernatural events in the formal sense, and which are very frequently granted in common judgments, because by a perverted conception

conception one believes to find in them something natural.

2.

What can be concluded from our Argument to the Preference of either the one or the other Order of Nature.

In the procedure of the purified philosophy there prevails a rule which, though it is not formally expressed, is always observed in the exercise, That in all investigations of causes to certain effects great attention must be bestowed to maintain as much as possible the unity of nature, that is, to derive many effects from a single ground already known, and on account of some seeming greater dissimilarity not directly to assume new and different efficient causes for different effects. It is consequently presumed that in nature there is great unity with regard to the sufficiency of a single ground to various species of consequents, and one believes to have reason to consider the union of one species of phenomena with those of another species for the most part as something necessary and not as an effect of an artificial and fortuitous order. How many effects are derived from the sole power of gravity, to which different causes were formerly believed to be necessary: the rising of some bodies and the falling of others. The vortices, in order to maintain the celestial bodies in orbs, were abolished, as soon as the cause of them was found in that simple power of nature. It is presumed with great

reason That the expansion of bodies by heat, light, the electric power, thunder and lightning, and perhaps the magnetic power of various phenomena are of one sort of active matter, which is every where diffused, namely, ether, and one is very unwilling to be obliged to assume a new principle for the same sort of effects. Even where a very exact symmetry appears to require a particular artificial order, one is obliged to attribute it to the necessary consequence of universal laws and still to observe the rule of unity before an artificial disposition is laid down. The snow-figures are so regular, and graceful so far beyond every clumsy thing that blind chance can produce, that the veracity of those who have given us drawings of them ought to be distrusted, did not each winter give innumerable occasions to assure every body of it by proper experience. Few flowers, which, as far as can be outwardly perceived, shew more neatness and proportion, are to be met with, and nothing that art can produce is to be seen more just than these productions, which nature spreads over the surface of the earth with such profusion. And yet it never entered into the mind of any one to derive them from a particular snow-seed, and to excogitate an artificial order of nature, but they are ascribed as a collateral consequence to more general laws, which comprehend under themselves at the same time with necessary unity the formation of this production.*

Nature

* The figure of mould similar to plants has induced many to number it among the productions of the vegetable kingdom.

Nature however is rich in another species of productions, and all philosophy, that reflects on its mode of origin, finds itself obliged to quit this way. Great art and a casual union by free choice conformable to certain designs, are evident in it, and are at the same time the ground of a particular law of nature, which belongs to the artificial order of nature. The structure of animals and plants show such a disposition, to which the universal and necessary laws of nature are insufficient. As it would now be absurd to consider the first generation of an animal or of a plant as a mechanical collateral consequence of universal laws of nature, there still remains a twofold question, which is undecided by the adduced ground, namely, whether every individual of those be immediately made by God, and consequently of a supernatural origin, and only the propagation, that is, the transition from time to time to developement committed to a natural law, or whether some individuals of the animal and vegetable kingdoms be of immediate Divine origin, yet with a faculty, not comprehensible to us, to engender and not merely to develope their like according to a regular law of nature. On both sides occur difficulties. It is perhaps impossible to make out which is the greatest difficulty; but what concerns us

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kingdom. According to other observations, however, it is more probable that its apparent regularity can hinder neither it nor Diana's tree to be looked upon as a consequence of the common laws of sublimation.

here is to remark the preponderance of the grounds only so far as they are metaphysical. For instance, that a tree by an internal mechanical constitution shall be able so to form and to model the sap, that in the buds or in the seeds shall arise something that either contains a similar tree in miniature, or from which such an one can be produced, is according to all our knowledge in no manner to be perspected. The internal forms of Buffon, and the elements of organized matter, which, in consequence of their reminiscences, according to the opinion Maupertuis, unite together conformably to the laws of appetite and aversation, are either just as unintelligible as the thing itself, or quite arbitrarily excogitated. But at the same time that all such theories are repudiated, must another, equally arbitable, be erected, namely, that all these individuals are of a supernatural origin, because their natural mode of beginning is not at all comprehended? Has ever any body rendered comprehensible the faculty of yest to generate mechanically its like? and yet one does not refer on that account to a supernatural ground.

As in this case the origin of all such organical productions is considered as totally supernatural, so it is believed that something is left for the natural philosopher, when he is allowed to play with the manner of the gradual propagation. But when one reflects that thereby the supernatural is not diminished, for let this supernatural procreation take place either at the time of the creation, or by little
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and little in different terms of time, in the latter case there is nothing more supernatural than in the former, for the whole distinction does not consist in the degree of the immediate Divine action, but in the *quando*. But as to that natural order of unfolding, it is not a rule of the fertility of nature, but a useless roundabout method. For not the smallest degree of an immediate Divine action is thereby put off. It therefore seems inevitable, either in every coition to attribute immediately to a Divine action the formation of the fruit, or to allow the first Divine disposition of animals and plants a fitness, not only to develope, but actualty to beget their like for the future according to a natural law.

My sole intention here is to shew that a greater possibility, than usual, must be granted the things of nature to produce their consequences according to universal laws.

CONTEMPLATION THE FIFTH.

THE INSUFFICIENCY OF THE USUAL METHOD OF PHYSICOTHEOLOGY EVINCED.

1.

Of Physicotheology in general.

All the modes of cognising the existence of God from its effects may be reduced to the three following. Either this cognition is attained by the perception of what interrupts

the order of nature and immediately denotes that Potency to which nature is subjected, this conviction is occasioned by *miracles*; or the *contingent* order of nature, of which is distinctly perspected that it was possible in various other manners, in which however great art, potency and goodness are conspicuous, leads to the Divine Author; or the *necessary* unity which is perceived in nature and the essential order of things, conformable to the great rules of perfection, in short, that which is necessary in the regularity of nature leads to a Chief Principle not only of this existence but even of all possibility.

When men are grown quite savage, or blinded by a stubborn wickedness, the first mean solely seems to have some power in itself to convince them of the existence of the Supreme Being. Whereas the right contemplation of a welldisposed mind finds in so much casual beauty and conjunction conformable-to-end, as the order of nature presents, proofs enow to conclude therefrom a will accompanied with great wisdom and potency, and to this conviction, so far as it is sufficient to virtuous conduct, that is, morally certain, the common conceptions of understanding suffice. To the third mode of concluding philosophy is of necessity required and that only is susceptible of a higher degree of it, to attain the same object with a clearness and conviction conformable to the greatness of the truth.

The two latter modes may be termed physicotheological methods; for they both show the

the way to ascend from the contemplations on nature to the cognition of God.

2.

The Advantages, and also the Faults of the usual Physicotheology.

The chief criterion of the physicotheological method hitherto in use consists in this, That the perfection and regularity be sufficiently comprehended first as to their contingency, and then the artificial order according to all references therein conformable-to-end evinced, and thence to infer and conclude a wise and good will, but afterwards, by the superadded contemplation of the greatness of the work, the conception of the immense potency of the Author is at the same time therewith united.

This method is excellent, first, because the conviction is extremely sensible, therefore very striking and engaging, and yet easy and conceivable to the most common intellect; secondly, because it is more natural than any other, as every one beyond a doubt begins from it first; thirdly, because it furnishes a very intuiting conception of the supreme wisdom, care or even the potency of the adorable Being, which fills the soul, and has the greatest power to impress astonishment, humility and awe.* This mode of

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proof

* When I reflect upon the microscopical observations of Doctor Hill and others, to be met with in the *Hamburgh Magazine*,

proof is much more practical than any other, even with regard to the philosopher. For though he does not meet here with the determinate abstract idea of the Divinity for his searching and plodding understanding, and though the certainty itself is not mathematical but moral, so many proofs, every one making so great impression, take possession of his soul, and speculation, with a certain confidence, quietly follows a conviction which has already taken place. One would hardly risk his whole felicity on the assumed rightness of a metaphysical proof, especially if vivid sensible persuasions opposed it. But the power of the conviction, which arises therefrom, because it is so sensible, is also so solid and unmoveable, that it is in no danger from syllogisms and distinctions, and is far above the might of subtile objections. This method, however, has its faults, which are considerable enough, though they are indeed to be imputed but to the procedure of those who have used it.

1. It considers all perfection, harmony and beauty of nature as contingent, and as a disposition

Magazine, and see numerous species of animals in a single drop of water, rapacious sorts which, equipped with instruments of destruction, while they are ready to pursue others, are destroyed by more potent tyrants of this aqueous world; when I see the tricks, the violence, and the scene of dissention in a particle of matter, and elevate my eyes in order to behold the immense space filled with worlds like clouds of dust, no human language can express the feeling, which such a thought excites, and all subtile metaphysical dissections fall far short of the sublimity and dignity peculiar to such an intuition.

position by wisdom, as many of them flow with necessary unity from the essential rules of nature. That which is the most detrimental to the design of physicotheology consists in its considering the contingency of the perfection of nature as highly needful to the proof of a wise Author, hence all the necessary consistencies of the things of the world become by this presupposition dangerous objections.

In order to be convinced of this fault let the following be attended to. It is obvious how assiduous the authors are according to this method to rescue the productions of the animal and vegetable kingdoms rich in innumerable final designs not only from the power of chance, but from the mechanical necessity according to universal laws of material nature. And in this there is nothing difficult to them. The preponderance of the grounds on their side is too much decided. But when they turn from organized to unorganized nature, they still persist in the same method, they find themselves, however, almost always caught by the altered nature of things in difficulties, which they cannot avoid. They constantly speak of the union, hit by great wisdom, of so many useful properties of the atmosphere, of the clouds, of rain, of the winds, of the twilight &c. &c., as if the property, by which the air is destined to the begetting of winds, were united in the same manner by means of a wise choice with that, whereby it draws up exhalations, or by which in great heights it becomes more rarefied, as
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in a spider the different eyes wherewith it watches its prey, and the teats out of which the cobweb is drawn with their fine paws or that part of their feet, by which they glue it together or support themselves upon it, are connected in one animal. In this latter case the unity, notwithstanding all the combined uses, (as in which the perfection consists,) is manifestly contingent, and to be attributed to a certain arbitrement, whereas in the former it is necessary; and if a fitness like the aforementioned is ascribed to the air, the other is not possible to be separated from it. Just because no other manner of judging the perfection of nature, than by the direction of wisdom, is granted, every extensive unity, so far as it is manifestly cognised as necessary, will make a very dangerous objection. It will soon be obvious that according to our method from such a unity is likewise concluded the Divine wisdom, but not so, that it is derived from the wise choice as its cause, but from such a ground in a Supreme Being, as must at the same time be in him a ground of great wisdom, consequently from a wise Being, but not by his wisdom.

2. This method is not philosophical enough, and has often much impeded the dissemination of philosophical cognition. When a regulation of nature is useful, it is commonly explained immediately from the design of the Divine will, or by a particular order of nature prepared by art; either because it has been conceived that the effects of nature, conformable

conformable to their most general laws, could not tend to such consistency, or were it granted that they have such consequences, this would signify, to trust the perfection of the world to a blind chance, by which the Divine Author would be much mistaken. Hence in such a case bounds are set to the inquiry of nature. Humbled reason willingly desists from a further investigation, because it considers such here as temerity, and the prejudice is the more dangerous, as it gives the lazy a preference to the indefatigable inquirer by the pretext of devotion and the just subjection to the Great Author, in whose cognition all wisdom must unite. The uses of the mountains, for instance, which are innumerable, are related, and when a great number of them has been collected, and among these such as the human species cannot do without, it is believed that there is reason to consider them as an immediate Divine disposition. For to contemplate them as a consequence of universal laws of motion, (as it is by no means presumed of these that they should have a reference to beautiful and useful consequences, it must needs be by chance,) would in their opinion mean, to allow an essential advantage of the human species to depend upon blind chance. In the very same manner is circumstanced the contemplation of the rivers of the earth. If the physicotheological writers are listened to, one is inclined to represent to himself that the beds of rivers were all excavated by God. It is not philosophising, when, by contemplating every

every single mountain, or every single stream, as a particular design of God that would not have been attained according to universal laws, those means are devised, which God may have particularly used in order to produce these individual effects. For according to what is shown in the third contemplation of this section, such a production is so far always supernatural, may, since it cannot be explained according to the order of nature (as it arose but as a single event by proper disposition), such a mode of judging is grounded in a perverted representation of the preference of nature in itself, though it must be led by compulsion to a single case, which according to all our insight may be considered as a roundabout mean and not as a proceeding of wisdom.* As Newton by infallible proofs convinced himself that the earth is of that figure, upon which all the directions of gravity altered by the motion of rotation stand perpendicular, he concluded that the earth was at first fluid, and has according to the laws of statics by means of the revolving assumed directly this form. He knew as well as any body the advantages that lie in the globular

* It is to be wished that in such cases, when revelation gives account that an event of the world is an extraordinary divine destiny, the temerity of philosophers were moderated in displaying their physical insights; for they do no service at all to religion, and render it but doubtful, whether the event be not a natural chance; as in that case, when the destruction of the army under Sanherib is attributed to the samiel wind. By this philosophy is commonly under the necessity of using, as in the Whistonian theory, the astronomical knowledge of comets for the expounding of the bible.

globular form of a cosmical body and also the highly necessary flattening in order to prevent the disadvantageous consequences of the turning upon the axis. All these are arrangements worthy of a wise Author. Yet Newton attributed them, without hesitation, as an effect to the most necessary mechanical laws, and was not apprehensive on that account of losing sight of the Great Ruler of all things.

It may certainly be presumed that, relatively to the fabric of the planets, their revolutions and the position of their orbs, Newton never would have had immediate recourse to a Divine direction, had he not judged that a mechanical origin is here impossible, not on account of its insufficiency to regularity and order in general, (for why did he not apprehend this unfitness in the aforementioned case?) but because the celestial spaces are void, and no communion of the effects of the planets on one another, to determine their rolling in orbits, is in this state possible. If it had however occurred to him to ask, whether these spaces were always void and whether, in the very first state, at least, when these spaces were perhaps filled in connexion, that effect, whose consequences have since maintained themselves, was not possible, if he had had a grounded presumption of this very oldest quality, one may be assured that he would in a manner fit for philosophy have sought in the universal laws the grounds of the nature of the structure of the world, without being afraid on that account that this explication would deliver over the world from
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the hands of the Creator to the power of chance. The eminent example of Newton ought not consequently to serve lazy confidence for a pretext to give out a precipitate appeal to an immediate Divine arrangement for an explication in a philosophical taste. Innumerable dispositions of nature, as they are according to the most general laws still contingent, have generally speaking no other ground, than the wise design of him, who willed that they should be so and not otherwise connected. But it cannot be conversely concluded that where a natural connexion harmonizes with what is conformable to a wise choice, it is also contingent according to the universal laws of effect of nature, and extraordinarily established by artificial direction. In this way of thinking it may often happen that the ends of the laws which one imagines are wrong, and then besides this error there is yet the disadvantage, to have passed by the efficient causes and to hold immediately to a design that is but chimerical. Suessmilch was formerly of the opinion to find the ground, why more boys than girls are born, in the design of Providence, in order by the great number of those of the male sex that the loss, which this sex sustains more than the other by war and dangerous sorts of employments, may be repaired. But by later observations this no less circumspect than reasonable man was taught that this surplus of boys in the years of childhood is taken away by death, that a less number of males than of females attain the age, when
the

the aforementioned causes can first contain the grounds of the loss. There is reason to believe that this curiosity is a case, which may rank under a much more general rule, namely, that the stronger part of the human species has also a greater share in the generative activity, in order to render its own sort predominant in the productions of both sides, but that, on the other hand, as more is requisite to the end that something which has the groundwork to greater perfection shall meet with all the circumstances proper for its attainment in the formation, a greater number of those of a less perfect sort attain the degree of completeness, than of those to whose completeness more coincidence of grounds is required. But whatever the nature of this rule may be, the observation at least may be made, That it impedes the enlarging of philosophical introspection to have recourse to moral grounds, that is, to the explication from ends, when it is yet to be presumed that physical grounds determine the consequence by a connexion with necessary laws that are more general.

3. This method can serve to prove but an Author of the connexions and artificial construction of the world, but not of matter itself and the origin of the constituent parts of the universe. This considerable fault must leave all those, who make use of this method only, in danger of that error, denominated the more refined atheism, and according to which God is considered as a workmaster and not as a Creator of the world, who hath indeed

ordered and formed, but not produced and created, matter. As I shall weigh this insufficiency in the next contemplation, I shall rest satisfied with having only mentioned it here.

Besides, the method in hand remains one of those methods, which are the most conformable as well to the dignity as to the weakness of the human understanding. There are in fact innumerable arrangements in nature, whose proxime ground must be a final design of its Author, and it is the easiest way that leads to him, when those dispositions, which are immediately subordinated to his wisdom, are pondered. Hence it is reasonable to exert one's self rather to complete, than to impugn them, rather to correct their faults, than to slight them on that account. The subsequent contemplation will be employed in this design.

CONTEMPLATION THE SIXTH.

IMPROVED METHOD OF PHYSICOTHEOLOGY.

Order and Fitness, though they are necessary, denote an intelligent Author.

Nothing can be more prejudicial to the thought of a Divine Author of the universe and at the same time more irrational, than when one is disposed to attribute a great and fruitful rule of fitness, utility and harmony

to chance; such as was the *clinamen* of the atoms in the system of Democritus and Epicurus. It is needless to insist on the absurdity and wilful delusion of this mode of judging; as it has been rendered by others sufficiently obvious, but I have to observe that the perceived necessity in the reference of things to regular connexions, and the cohesion of useful laws with a necessary unity, as well as the contingent and arbitrable disposition, afford a proof of a wise Author; though the dependence on him in this point of view must be represented in another manner. In order to perspect this sufficiently it must be noticed that the order and various advantageous harmony in general denote an intelligent Author, even before one reflects, whether this reference is contingent or necessary to the things. According to the judgments of common sound reason the course of the alterations of the world, or that connexion, in whose place another was possible, though it furnishes a clear proof of contingency, has little effect to occasion the understanding the presumption of an Author. Philosophy is thereto requisite and even its use is in this case implicated and slippery. Whereas great regularity and consistence in a harmony of many parts astonishes, and common reason itself, without an intelligent Author, can never find them possible. Let the things themselves be necessary or contingent, let the one rule of fitness essentially lie in the other, or be arbitrarily conjoined with it, one finds it directly impossible that order and regularity should of

themselves find place either by chance, or even among many things, which have their different existence, for diffused harmony is never, without an intelligent ground as to its possibility, sufficiently yielded. And here manifests itself forthwith a great difference between the modes in which the perfection according to its origin is to be judged.

2.

Necessary Order of Nature denotes even an Author of Matter that is so ordered.

The order in nature, so far as it is considered as contingent and springing from the arbitrement of an intelligent Being, is no proof at all that the things of nature also, which are connected in such an order according to wisdom, have their existence from this very author. For only this conjunction is of such a nature, as to presuppose a rational plan; hence Aristotle and many other ancient philosophers derived from the Deity not the matter or the stuff of nature, but only the form. Perhaps but since the time that revelation taught us a perfect dependence of the world on God, has philosophy first taken the proper pains to contemplate the origin of things themselves, which constitute the raw materials of nature, as something that is not possible without an Author. I doubt of any one's having succeeded in this, and in the last section shall assign reasons for my judgment. At least the contingent order of the parts of the

the world, so far as it indicates an origin from arbitrement, can contribute nothing at all to its proof. For instance, in the make of an animal members of sensation are so artificially conjoined with those of voluntary motion and of the vital parts, that one must be wick'd, (for nobody can be so unreasonable,) as soon as he is led to mistake a wise Author, who hath brought the matter of which an animal body is composed into such excellent order. Nothing more at all follows from this. Whether this matter of itself be eternal and independent, or produced by the very same Author, is not at all therein decided. But, when it is perceived that all perfection of nature is not artificial, but rules of great utility are also conjoined with necessary unity, and this union lies in the possibilities of the things themselves, the judgment falls out quite otherwise. What is to be judged concerning these perceptions? Is this unity, this fertile consistence possible, without dependence upon a wise Author? The formal of so great and manifold regularity answers, no. As this unity is grounded even in the possibility of things, so there must be a wise Being, without whom all these things of nature themselves are not possible, and in whom as a great Ground the essences of so many things of nature unite themselves in so regular references. But then it is clear that not only the manner of conjunction, but the things themselves are possible by this Being only, that is, can exist but as effects of him, which first gives sufficiently to cognize the

total dependence of nature upon God. Is it now inquired, How this nature depends on such a Being, in order that I can therefrom understand the agreement with the rules of wisdom? My answer is, They depend upon that in this Being, which, whilst it contains the ground of the possibility of things, is also the ground of his own wisdom; for this presupposes that in general.* But together with this unity of the ground, as well of the essence of all things, as of wisdom, goodness and potency, it is necessary That all possibility shall harmonize with these properties.

3.

Rules of the improved Method of Physico-theology.

I comprehend them briefly in the following. Led by the confidence in the fruitfulness of the universal laws of nature, on account of their dependence upon the divine Being, let

1. The cause, even of the most advantageous constitutions, be sought in such universal

* Wisdom presupposes That agreement and unity in the references are possible. That Being, who is of a totally independent nature, can be wise but so far as grounds, even of such possible harmony and perfections as present themselves to his execution, are comprised in him. Were in the possibility of things no such reference to order and perfection to be found, wisdom would be a chimera. But were this possibility not grounded in the wise Being himself, this wisdom could never be in every point of view independent.

sal laws, as, with a necessary unity, besides other fit consequences, stand in reference to the production of these effects.

2. Let the necessary in this connexion of different fitnesses in one ground be observed, since as well the mode, in order to conclude therefrom the dependence on God, is different from that, which has the artificial and chosen unity in view, as in order to distinguish from chance the consequence according to constant and necessary laws.

3. Let there be presumed not only in the unorganized, but in the organized nature, a greater necessary unity, than is directly obvious. For even in the structure of an animal is to be presumed that a single predisposition has a fitness for many advantageous consequences, to which we at first might find necessary various particular dispositions. This attention is no less conformable to philosophy, than advantageous to the physicotheological consequence.

4. Let the manifest artificial order be used, in order thence to conclude the wisdom of an Author as a ground, but of the essential and necessary unity in the laws of nature, in order to conclude a wise Being as a ground, not by means of his wisdom however, but by virtue of that in him, which must harmonize with it.

5. Let from the *contingent* combinations of the world be concluded the Author of the manner in which the universe is conjoined, but from the *necessary* unity the very same Being as an Author even of matter and of

the fundamental stuff of all the things of nature.

6. Let this method be enlarged by universal rules, which can render intelligible with the good of the whole the grounds of the consistence of what is either mechanically or geometrically necessary, and let it not be neglected to perpend in this point of view the properties of space and from the unity in its great multifarious to dilucidate the same chief conception.

4.

Illustration of these Rules.

In order to render the aforesaid method more intelligible I shall adduce a few examples. The mountains of the earth are one of the most useful constitutions on it, and Burnet, who considers them as nothing better, than a devastation for the punishment of our sins, is without doubt wrong. According to the usual method of physicotheology the extensive advantages of these tracts of mountains are related, and on account of so various designed utility are considered as a Divine arrangement by great wisdom. According to such a mode of judging one is led to the thought, that universal laws, without a peculiar artificial disposition to this case, had not brought to pass such a form of the surface of the earth, and the appeal to the Almighty Will commands a respectful silence to inquiring reason. Whereas, according to a better instructed mind,

mind, the use and the beauty of this disposition of nature are by no means a ground to pass by the universal and simple laws of action of matter, in order not to consider this constitution as a collateral consequence of them. It might perhaps be more difficult to make out, Whether this globous figure of the earth in general be not of more considerable advantage and more weighty consequences, than those inequalities, which make its surface deviate somewhat from this precise sphericity. Yet no philosopher hesitates to consider it as an effect of the most general static laws in the most ancient epoch of the world. Why should not the inequalities and prominences too belong to such natural and inartificial effects? It seems That in every great mundane body the state, in which it gradually passes from fluidity to rigidity, is very necessarily combined with the production of extensive cavities, which must be found under its indurated crust, when the lightest substances of its internal yet fluid mass, among which is also air, rise up among these by a gradual separation, and that, as the extensiveness of these cavities must have a proportion to the size of the mundane body, the depressions of the firm vault are equally far extended. Even a sort of regularity, at least the chain of these inequalities, needs not appear strange and be unexpected. For it is known that the rising of the light substances in a great mixture in one place, has an influence on the same motion in the neighbouring part of the mixture. As it is not my design here

to shew any attachment to this mode of exposition, I do not dwell long on it, but only give a small illustration of the method of judging by it.

All the land of the earth is traversed in a very advantageous manner by the beds of rivers like furrows. But there are also so many inequalities, vallies and flat tracts on all land, that at first sight it appears to be necessary that the canals, in which their waters run, must be peculiarly built and ordered, else, from the irregularity of all the other ground, the water running from the heights extravagates to a great distance, overflows many plains, forms lakes in vallies, and must render the land rather wild and useless than beautiful and well-arranged. Who does not perceive here a great appearance of a necessary extraordinary preparation? Meanwhile, an end is put to all inquiry of the naturalists concerning the cause of rivers by a supposed supernatural order. As I do not allow myself to be led astray by this sort of regularity, and do not so easily expect its cause without the sphere of universal mechanical laws, so I shall follow observation, in order therefrom to conclude something of the mode of production of these rivers. I perceive that many beds of rivers still continue to form themselves, and that they raise up their own banks, till they do not overflow the surrounding land so much as formerly. I am certain that all rivers of old actually extravagated in this manner, as we are apprehensive that they must have done so without an extraordinary direction,

direction, and hence I gather that no such extraordinary arrangement ever happened. The river Amazon in a tract of some hundred miles shows distinct traces that it formerly had no limited bed, but must have flooded the country to a great extent; for the land on both sides to a great distance is as flat as the sea, and consists of river-slime, where a pebble is as rare as a diamond. The very same is found with regard to the Mississippi. And in general the Nile and other rivers show that these canals in process of time have been greatly lengthened, and where the river appeared to have its mouth, as near to the sea it extends itself over the flat ground, it insensibly bends its course and flows farther in a lengthened bed. But then, after having been led into the track by experiences, I believe to be able to reduce the whole mechanism of the formation of the channels of all rivers to the following simple grounds. The fountain or rain water running from the heights at first poured irregularly according to the declivity of the ground, filled several vallies, and extended itself over many flat countries. But in these tracks, wherever the current of water was the strongest, it could not so well, on account of the velocity, deposite its mud, which settled more plentifully on both sides. Thereby the banks were raised up, while the strongest current kept its channel. In progress of time, when the afflux of the water itself was less, (which must finally take place, from causes known to those who are acquainted with the history of the earth) the river no longer

longer overflowed the banks, which it formed itself, and out of wild disorder arose regularity and order. It is evident that this still happens, chiefly at the mouths of rivers, which are their latest formed parts, and as according to this plan the subsiding of the mud must happen more plentifully near the places where the river at first overflowed its new banks than farther from them, it is still to be perceived that in many places, where a river runs through flat countries, its channel lies higher than the surrounding plains. There are certain universal rules according to which the effects of nature happen, and which may throw some light on the reference of the mechanical laws to order and consistency, one of which is, The powers of motion and of resistance act upon one another, till they cause one another the least impediment. The grounds of this law may be easily perspected; but the reference which its consequences have to regularity and advantage is astonishingly extensive and great. The epicycloid, an algebraical curve, is of this nature: the denticles and spring-wheels rounded according to it suffer the least possible friction upon one another. The celebrated professor Kastner mentions that one skilled in mining showed him in machines, which had been long used, that at last this figure actually wears away by long motion; a figure, which has at bottom a pretty complicated construction, and which with all its regularity is a consequence of a common law of nature.

In order to produce something from the
bad

bad effects of nature, which, whilst it ranks under the law just mentioned, on that account shows in itself a bias to regularity, I shall mention one of the effects of rivers. Because of the great varieties of the declivity of all countries of the earth it is to be expected that the rivers, which run upon this declivity, will here and there have steep falls or cascades, a few of which actually though seldom occur, and occasion a great irregularity and inconvenience. But it is evident that, though (as it is to be presumed) in the first wild state such cataracts were numerous, the power of the fall must have washed away the loose earth, nay, even worn away some sorts of rock not yet sufficiently hardened, till the river sunk its channel to a tolerably uniform declivity, hence where there are still waterfalls, the ground is rocky and in many countries the river bends its course between two steep banks, where it has itself perhaps cut its deep lying bed. It is found very useful that almost all rivers in the greatest part of their course do not exceed a certain degree of velocity, which is pretty moderate and whereby they are navigable. In the beginning this was scarcely to be expected alone without particular art from the so very different declivity of the ground upon which they run, yet it may be easily conjectured that in time a certain degree of rapidity, which they cannot easily surpass, must have been to be found of itself, let the ground of the country be ever so sloping, if it is but loose. For they wash it away, work themselves into it, and sink
their

their bed in some places and raise it in others, till that, which they sweep away, when they are swollen, is tolerably equal to what they let sink to the bottom during the slower motion. The power acts here till it has brought itself to a more moderate degree, and till the reciprocal action of the percussion and of the resistance ends in equality.

Nature gives innumerable examples of an extensive and various usefulness of the very same thing. It is very perverted to consider these advantages directly as ends, and as the consequences, which contain the motives, why their causes are ordered by Divine arbitrement in this world. The moon among other advantages provides for this likewise, that the flux and reflux of the tide contrary to or even without wind put ships in motion by means of the current in the roads and near the land. By means of its and of Jupiter's satellites the longitude at sea is found. Every one of the productions of the kingdoms of nature is of great utility, some of which are used. It is a nonsensical way of judging, when, as it commonly happens, one numbers all these to the motives of the Divine choice and refers on account of the advantage of Jupiter's moons to the wise direction of the Author, who thereby intended to furnish men with a mean to determine the longitude of places. Care must be taken not to incur the mockery of a Voltaire who, in a similar tone, says, that the reason why we have noses is, no doubt, in order to put spectacles upon them. A sufficient ground is not given by the Divine will, why

why the very same means, which are alone necessary to attain an end, are advantageous in so many other references. That admirable communion that prevails among the essences of all that is created, whose natures are not foreign to one another, but connected in manifold harmony agree with one another of themselves, and comprise in their essence an extensive necessary union to all perfection, is the ground of so various utilities, which according to our method may be considered as proofs of a highly wise Author, but not in all cases as dispositions, which, on account of the particular collateral advantages, are conjoined by particular wisdom with the others. No doubt the motives of Jupiter's having moons are complete, though these moons were never used for measuring the longitude by the invention of the telescope. These uses, which are to be considered as collateral consequences, are however taken into the account, in order thence to conclude the immense greatness of the Author of all things. For they are, together with millions of others of a similar sort, proofs of the great chain which, even in the possibilities of things, unites the parts of the creation that appear not to concern one another; for else the use, which the consequence of a voluntary disposition draws after it and which the Author knows and comprehends in his decree, cannot always on that account be numbered to the motives of such a choice, were these, even abstracting from such collateral consequences, already complete. It is beyond a doubt that
nature

nature did not place water horizontally, in order to serve for a looking-glass. Such observed usefulness cannot at all, if one is to judge rationally, be used for the purpose here in view, according to the limited physico-theological method in use; but only the supplement which we have endeavoured to subjoin to it can render such collected observations fit grounds of the weighty consequence of the universal subordination of all things to a supremely wise Being. Extend your views as much as you can to the immense use, which a creature offers in a thousandfold reference according to the possibility at least, (the single cocoa-tree affords the Indian innumerable uses), connect in such references the most remote members of the creation with one another. When you have reasonably admired the productions of the immediately artificial dispositions, do not forbear, even in the delightful spectacle of the fertile reference, which the possibilities of created things have to thorough harmony, and the inartificial consequence of such various beauty which naturally presents itself, to admire and to adore that Potency, in whose original source, so to speak, lie ready the essences of things to an excellent plan.

I observe, by the way, that the great counterrelation, which is among the things of the world with respect to the frequent occasion it gives to similitudes, analogies, parallels and however they may be named, deserves not to be so superficially overlooked. Not to dwell on the use which this has for the

the play of wit and which for the most part is but imaginary, in my opinion there still lies herein hidden a weighty object of reflection for the philosopher, how such an agreement of very different things in a certain common ground of equiformity can be so great and extensive and yet at the same time so exact. These analogies are also very necessary helps to our cognition, the mathematics furnish a few of them. I avoid aducing examples, for it is to be feared that, according to the different manner in which such similarities are felt, they might not have the same effect on every other understanding, and besides, the thought which I here intersperse is incomplete and not yet sufficiently intelligible.

Should it be asked, What use can be made of the great unity in the various relations of space, which the geometrician investigates, I presume the universal conception of the unity of the mathematical objects may give to cognise the grounds of the unity and perfection in nature. For instance, of all figures the circle is that, in which the circumference comprehends the greatest possible space that such a compass can comprehend, because an exact equality in the distance of this circumscription from a centre thoroughly prevails therein. If a figure shall be enclosed by straight lines, the greatest possible equality relating to their distance from the centre can find place but when not only the distances of the centres from this centre among one another, but the perpendiculars from this to the sides are quite equal to one another. Hence

is formed a regular polygon, and geometry shews, that with the very same periphery another polygon of the same number of sides always encloses a smaller space, than the regular one. Again, one and indeed the simplest sort of equality in the distance from a centre is possible, namely, when merely the distance of the points of the angles of the square from the same centre is thoroughly equal, and there it is evident that every irregular polygon that can stand in a circle encloses the greatest space of all that can be closed by the same sides. Besides this there is that polygon, in which the size of the side is equal to the distance of the point of the angle from the centre, that is, the regular hexagon of all figures in general is that one which, with the greatest circumference, so encloses the greatest space, that it at the same time, externally composed with other equal figures, leaves no interstices. Here presents itself very soon the observation, that the counterrelation of the greatest and of the smallest in space concerns the equality. And as nature furnishes a number of cases of a necessary equality, so the rules, which are taken from the said cases of geometry with respect to the universal ground of such counterrelations of the greatest and of the smallest, may be applied to the necessary observance of the law of frugality in nature. In the laws of percussion a certain equality is always so far necessary, that after the stroke the motion of both bodies, when they are not elastic, is always equal, when they are elastic, both are always stricken alike by the elasticity and indeed

indeed with a force wherewith the percussion happened, that the centre of gravity of both bodies is not altered at all by the percussion in either its rest or its motion &c. &c. The relations of space are so infinitely various, and yet allow so certain a cognition and clear intuition, that, as they have often served excellently for symbols of cognitions of quite another species, (for example, to express the expectations in the cases of fortune,) they can also furnish means to cognise from the simplest and most general grounds the rules of perfection in natural necessary laws of action, so far as they concern relations.

Ere I conclude this contemplation, I shall adduce all the different degrees of the philosophical mode of explaining the phenomena of perfection occurring in the world, so far as they are altogether considered under God, beginning from that manner of judging, in which philosophy still hides itself, and ending with that, in which it shows its greatest effort. I am to speak of the order, beauty and fitness so far as they are the ground of subordinating, in a manner suitable to philosophy, the things of the world to a Divine Author.

First, a single event in the course of nature may be looked upon as something immediately drawing its origin from a Divine action, philosophy here has no other business, than to assign a proof of this extraordinary dependence.

Secondly, an event of the world is considered as one, to which as to a single case the mechanism of the world was from the

creation particularly adjusted, as, for instance, the deluge according to the system of several moderns. But then the event is not less supernatural. Natural philosophy, which the aferesaid philosophers use in this, serves but to show their own address in exco-
gitating something that may come to pass according to universal laws, and whose consequence may terminate in the pretended extraordinary event. For else such a procedure is not conformable to the Divine wisdom, that never aims at boasting of useless art, which would be blamed even in a man who, if nothing hindered him to fire a cannon immediately, would affix a lock with clockwork, by which it would by a mechanical ingenious mean fire at the appointed moment.

Thirdly, when certain parts of nature are considered as a disposition which, continuing since the creation, immediately proceeds from the hand of the great workmaster; and indeed as a disposition, which is introduced as a single thing, and not as a disposition according to a constant law. For example, when it is maintained that God immediately regulated at the same time with the beginning of all things the mountains, the rivers, the planets and their motions. As a state of nature, in which the form of things, as well as the matter, depends immediately on God, must no doubt be the first, this mode of judging has so far a philosophical ground. But, as it is precipitate, before the fitness which is peculiar to the things of nature has been proved, to attribute to the action of the creation immediately

mediately a disposition, because it is advantageous and regular, it is so far in a very small degree only philosophical.

Fourthly, when something is ascribed to an artificial order of nature, before the insufficiency, which it has to this according to common laws, is properly cognised, for instance, when something, which perhaps lies in common mechanical powers, is explained from the order of the animal and vegetable kingdoms, merely because order and beauty are therein great. That which is philosophical of this manner of judging is yet smaller, when every single animal or plant is immediately subordinated to the creation, as if, besides a few immediately created, the other productions were subordinated to it according to a law of the faculty of procreation (not merely of the faculty of developement), because in the latter case more is explained according to the order of nature; it must then be that this its insufficiency with regard to it may be clearly evinced. But to this degree of the philosophical mode of explaining belongs also every derivation of a disposition in the world from artificial laws in general established for the sake of a design, and not merely in the animal and vegetable kingdoms.* For instance, when snow and

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* In the second number of the third contemplation of this section I have adduced among the examples of the artificial order of nature those merely from the animal and vegetable kingdoms. But it is to be noticed that every disposition of a law for the sake of a particular use, because it is hereby excepted from the necessary unity with other laws of nature, is artificial, as may be perceived from a few examples here mentioned.

the aurora borealis are spoken of in such a manner, as if the order of nature that produces both were introduced for the sake of the use of the Greenlander or of the Laplander (in order that he may not, during the long nights be in utter darkness), though it is still presumable that this is a well-suited collateral consequence with necessary unity of other laws. There is almost always danger of this fault, when a few uses for men are given as a ground of a particular Divine regulation, for example, that the forests and fields are for the most part covered with a green colour, as of all colours this has a middle strength, in order to maintain the eye in a moderate exercise; whereas, it may be objected that the inhabitants of Davis' streights are almost blinded by the snow and must have recourse to snow-spectacles. It is not blameable to search for the useful consequences and to attribute them to a benign Author, but to represent the order of nature according to which they happen as artificial and arbitrarily conjoined with others, as it perhaps stands with others in a necessary unity, is blameable.

Fifthly, The method of judging of the perfect dispositions of nature comprises the most the spirit of true philosophy, when it is always ready to grant even supernatural events, as also not to mistake the true artificial dispositions of nature, the tendency to advantage and to all consistency does not hinder the grounds from being looked for in necessary universal laws, with great solicitude for the preservation of unity and with a reasonable
aversion

aversion to multiply on their account the number of the causes of nature. When to this is added the attention to the universal rules, which can render comprehensible the ground of the necessary conjunction of what naturally happens without a particular disposition with the rules of the advantage or of the agreeableness to rational beings, and one then ascends to the Divine Author, this physicotheological mode of judging sufficiently discharges its duties.*

CONTEMPLATION THE SEVENTH.

COSMOGONY.

An Hypothesis of a mechanical Mode of Explaining the Origin of the mundane Bodies and the Causes of their Motions, conformable to the Rules before evinced.

The figure of the heavenly bodies, the mechanism according to which they move and compose a mundane system, as also the various alterations to which the position of their orbits is in process of time subjected, all these are become a part of natural philosophy, which is comprehended with so great distinct-

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* By this I mean to say that this must be the way for human reason. For who can ever prevent here manifold errors; according to Pope:

Go, teach Eternal Wisdom how to rule —
Then drop into thyself, and be a fool!

ness and certainty, that there cannot be shown another introspection, which explains a natural object (that approaches but in some measure to this its multifariousness,) in a manner so indubitably right and with such evidence. When this is taken into consideration, it cannot but be presumed that the state of nature, in which this structure took its beginning, and the motions, which at present continue according to so simple and comprehensible laws, were first impressed on it, will in like manner be easier to be perspected and more conceivable, than perhaps the most of which we seek the origin in nature. The grounds favourable to this presumption are obvious. All these celestial bodies are round masses, for what we know without organization and secret preparation of art. The power by which they are attracted is according to all appearance a fundamental power proper to matter, therefore needs not, and cannot, be explained. The projectile motion with which they perform their flight and the direction according to which this motion is communicated to them, are together with the formation of their masses the principal, nay, almost the only thing of which the first natural causes are to be sought. Simple and by far not so implicated effects, as most of the others of nature are, by which the laws according to which they happen are commonly not at all known with mathematical accuracy, whereas here they lie open to view in the most comprehensible plan. With so great an appearance of a happy issue there is nothing else in the way, than

than the impression of the moving greatness of such a member of nature as is a solar system, where the natural causes are all suspected, because their sufficiency seems to be much too weighty and opposite to the right of creation of the Supreme Author. But could not this be said of mechanics likewise, by which a great mundane fabric, when it once exists, preserves its motions henceforward. Their whole preservation depends on the very same laws, according to which a stone, that is projected in the air, describes its path; a simple law, productive of the most regular consequences, and worthy of being intrusted with the preservation of the structure of a whole world.

It may be said, on the other side, that we are not able to render distinct the causes of nature, whereby the meanest herb is generated according to fully comprehensible mechanical laws, and yet the explanation of the origin of a cosmical system in the gross is attempted. But has ever a philosopher been able to render the laws only, according to which the growth, or the internal motion in a plant already extant, takes place, as distinct and mathematically sure, as are those to which all the motions of the mundane bodies are conformable. Here the nature of the objects is quite altered. The great, the astonishing here is infinitely more comprehensible, than the small and the admirable, and the production of a planet, together with the projectile motion whereby it is slung in order to roll in an orb, is to all appearance to

be easier and more distinctly perspected, than the production of a single flake of snow, in which the measured accuracy of a hexagon is according to appearance exacter than the rounding of the circles in which the planets run, and in which the rays refer more accurately to a plane, than the orbits of these celestial bodies do towards the common plane of their circular motions.

I shall represent the essay of an explanation of the origin of the structure of the world according to universal mechanical laws, not of the whole order of nature, but only of the great masses and their orbits, which make up the rudest foundation of nature. I hope, though my sketch is but rude and unfinished, to advance what may give occasion to weighty contemplations by others. Some parts of which have in my opinion a degree of probability, that in a smaller object would leave little doubt, and which nothing but the prejudice of a greater requisite art, than is ascribed to the universal laws of nature, can oppose. It frequently happens that that which is sought is not found, but yet other advantages, not expected, are met with on this road. Such advantages, should they present themselves to the reflection of others, admit the chief end of the hypothesis thereby to disappear, would be a sufficient gain. In this I presuppose the universal gravitation of matter according to Newton or his followers. Those, who believe, perhaps by a definition of metaphysic in their own taste, to annihilate the consequence drawn by acute men from observation
and

and a mathematical mode of concluding, may pass over the subsequent positions, as something that has but a remote affinity with the chief design of this work.

1.

*An enlarged View of the Contents of the
Universe.*

The six planets * with their attendants move in circles, which do not decline far from a common plane, the lengthened equatorial plane of the sun. The comets on the other hand run in orbs, which are at a great distance therefrom, and digress on all sides far from this plane of reference. If now, instead of so few planets or comets, a few thousands of them belonged to our solar world, the zodiac would appear as a zone illumined by innumerable stars, or as a stripe that loses itself in a pale glimmer, in which some of the nearer planets would exhibit a tolerable lustre, but the more distant, by their number and faintness of the light, only a nebulous appearance. For in this martial motion, in
which

* Since 1783, when this treatise was published, the knowledge of our solar system has been greatly enlarged. We now count seven primary and fourteen secondary planets. Kant foretold in 1755 (in his *UNIVERSAL PHYSIOGONY AND THEORY OF THE HEAVENS*) from theoretical grounds what Herschel discovered many years after by the assistance of his gigantic telescope. It cannot but be interesting to compare the structure of the heavens, which one great man has conceived according to Newtonian laws from the original *genesis* of the celestial bodies, with the construction of the heavens as another great man has exhibited it according to observations.

which all these are about the sun, there would always be a few in all parts of this zodiac, though others had altered their places. Whereas the comets would cover the regions on both sides of this luminous zone in all possible dispersion. When we, prepared by this fiction, (in which we have done nothing but augment in thought the multitude of bodies of our planetary world,)* turn our eyes to the more extensive compass of the universe, we actually see a bright zone, in which stars, though to all appearance they have very unequal distances from us, are heaped closer than elsewhere on the very same plane, whereas the celestial regions are covered on both sides with stars in every mode of diffusion. The milkyway, which I mean, has very exactly the direction of one of the greatest circles, a determination worthy of every attention, and whence may be understood that our sun and we with him are comprehended in the same army of stars, which throngs the most to a certain common plane of reference, and the analogy is here a very great ground to presume. That these suns, to whose number our sun belongs, compose a mundane system, which in the gross is ordered according to laws similar to those of our planetary world in the small; that all these suns together with their attendants may have some one centre of their common circle, and that only on account of their immense distance and of the long duration of their circulary course they appear not at all to alter their places, though indeed in some a little displacing is actually observed;
that

that the orbits of these great mundane bodies refer in like manner to a common plane, from which they do not deviate and that those, which occupy the other regions of the heavens with much less accumulation, are therein similar to the comets of our planetary world. From this conception, which meseems has the greatest probability, may be presumed that, if there are more such high mundane dispositions, as those to which pertains our sun, and which furnishe him, who is placed in the sun, the phenomenon of the galaxy, in the depth of the cosmical space some of them are to be seen like faint glimmering places, and when the plane of reference of such another order of fixed stars is obliquely placed towards us, appear like elliptic figures, which from a great distance exhibit in a small space a solar system as that of our milky-way is. And such little places astronomy has long ago discovered, though the opinions, which have been entertained of them, are very different, as may be seen in Maupertuis' work on the figure of the stars.

I wish this contemplation may be considered with some attention. Not only because the conception of the creation that thereby arises is much more touching, than it otherwise can be, (as an innumerable host of suns like our sun compose a system, whose members are conjoined by circular motions, but these systems, which in all probability are innumerable, of which we can perceive a few, may themselves be members of a yet higher order,) but because even the observation

tion of the fixed stars near us, or rather slow wandering suns, led by such a conception may perhaps discover many things that escape attention when there is not a certain plan of investigation.

2.

*Grounds of a mechanical Origin of our
planetary World in general.*

All the planets revolve about our sun in the same direction and with but a small declination from a common plane of reference, the ecliptic, in the same manner, as bodies carried away by a matter which, whilst it fills the whole space, performs its motion whirling round an axis. All the planets gravitate towards the sun, and the greatness of the side-motion, if they shall thereby be brought to roll in circular orbs, would need to have an exactly measured correctness, and as in such a mechanical effect a geometrical exactness is not to be expected, so all the orbs deviate, though indeed not much, from the circularity. They consist of substances, which according to Newton's calculation the farther they are from the sun are of the smaller density, as every body, if they have formed themselves in the space in which they float from a mundane matter there diffused, will find natural. For in the effort with which every thing sinks towards the sun, the substances of a more dense nature must crowd more towards the sun and cumulate themselves
more

more in his proximity, than those of a lighter sort, whose fall is more retarded on account of their less density. But the matter of the sun is according to Buffon's observation pretty equal in density to that which the computed mass of all the planets together would have, which agrees well with a mechanical formation, according to which in different altitudes the planets may have formed themselves from different species of elements, all the other elements, however, which filled this space in a mingled manner, may have sunk to their common centre the sun.

Who, notwithstanding this, will have this structure immediately delivered into the hand of God, without attributing any thing to mechanical laws, is obliged to assign a reason, why he here finds necessary that which he does not easily grant in natural philosophy. He cannot at all name any ends why it were better that the planets should move in orbits rather in one than in different directions, rather near one plane of reference, than through all regions. The heavenly space is at present void and notwithstanding all this motion they (the planets) would not impede one another. I willingly grant that there may be hidden ends which, according to common mechanics, would not be attained and which no mortal perspects; but nobody is allowed to presuppose them when he wishes to ground an opinion thereupon without being able to show them. In fine, had God immediately distributed the projectile power and arranged their orbits, it is to be presumed that they
would

would not bear the mark of imperfection and variation, which is to be met with in every production of nature. If it were good that they should refer to a plane, it is to be presumed he would have arranged their orbits to it, had a circular motion been proper for them, it may be believed that their orbs would have been exactly circular ones, and it is not to be conceived why there should remain exemptions from the greatest accuracy even in that which must be an immediate Divine performance, of art.

The members of the solar world from the most distant regions, the comets, bend their course in a very eccentric manner. They might, if it depended upon an immediate Divine action, just as well be moved in circular orbs, though their orbs should deviate ever so much from the ecliptic. The use of an eccentricity so great is in this case excogitated with great boldness, for it is sooner comprehensible, that a mundane body always moves at an equal distance, in whatever celestial region it be that has the order conformable to this distance, than that it is equally advantageously ordered according to the great difference of the distance; and as to the advantages assigned by Newton, it is evident that they have not the smallest probability, except that in the presupposed immediate Divine disposition they may serve at least for some pretence of an end.

This fault, immediately to subordinate the structure of the planetary world to Divine designs, is the most conspicuous, when one
is

is disposed to feign motives of the density of the planets that may be conversely decreased with the increase of the distances. The effect of the sun, it is said, decreases in this ratio, and it is fit that the density of the bodies that are to be warmed by him should be ordered proportionally to it. Now it is known that the sun acts but at a small depth below the surface of a mundane body, and from his influence to warm it cannot be concluded the density of the whole mass; here the conclusion from the end is far too great. The mean, namely, the diminished density of the whole mass, comprises an ampliation of disposition, which for the greatness of the end is superfluous and unnecessary.

In all natural productions, so far as they tend to consistency, order and use, agreement with Divine views is obvious, but also criteria of the origin from universal laws, whose consequences reach much farther than to such single cases, and therefore in every single effect are to be seen traces of a mingling of such laws, which were not directed to this single production only. For which reason deviations from the greatest possible exactitude with regard to a particular end find place. Whereas an immediate supernatural disposition, as its execution by no means presupposes the consequences of more general laws of action of matter, is not deformed by particular collateral consequences of them intermingling themselves, but brings to pass exactly the plan of the greatest possible accuracy. In the nearer parts of the planetary world to

the common centre there is a greater approximation to complete order and measured exactitude which, towards the boundaries of the system, or far from the plane of reference to the sides, degenerates into irregularity and deviations, as is to be expected of a constitution of a mechanical origin. In an immediate Divine disposition incompletely accomplished ends never can be met with, but the greatest correctness and precision are every where displayed, as amongst other things may be perceived in the structure of animals.

3.

A short Delineation of the probable Manner in which a planetary System may have been mechanically formed.

The arguments in support of a mechanical origin at present adduced are so weighty, that even but a few of them have long since induced all naturalists to seek the cause of the planetary way in natural motive powers, chiefly as the planets in the very same direction in which the sun turns upon his axis roll round him in orbits, and their orbits coincide so very nearly with this their equatorial plane. Newton was the great destroyer of all these vortices, to which however many adhered long after his demonstrations, as may be seen by the example of the celebrated Marian. The sure and convincing proofs of the Newtonian philosophy

philosophy evidently show that such things, as the vortices must be, which carry round the planets, are by no means to be met with in the heavens and that there is no current at all of such fluidity in these spaces, that even the tails of the comets continue their unmoved motion obliquely through all these orbits. It was sure hence to conclude that, as the celestial space is at present void or infinitely rare, no mechanical cause which imprinted on the planets their orbicular motion can find place. But directly to pass by all mechanical laws, and by a bold hypothesis to let God immediately project the planets with his hand, in order that they in conjunction with their gravitation should move in orbs, was too great a step to remain within the compass of philosophy. It is immediately obvious that there yet remains a case, where mechanical laws of this constitution are possible; namely, if the space of the fabric of the planets which is now void was formerly filled, in order to occasion a communication of motive powers through all the tracts of this district wherein prevails the attraction of our sun.

And here I can point out that quality, the only one possible, by which a mechanical cause of the heavenly motions has place, a considerable circumstance for the justification of an hypothesis, which can be but seldom boasted of. As the spaces are at present void, they must have formerly been full, otherwise an extensive effect of the motive powers driving in orbits never could have had place. And consequently this diffused matter must have

afterwards collected itself upon the celestial bodies; That is, when I contemplate it nearer, even these celestial bodies have formed themselves from the diffused fundamental substance in the spaces of the solar structure, and the motion, which the parts of their composition had in the state of dispersion, remains with them after the union in separate masses. Ever since have the spaces been empty. They contain no matter which among these bodies could serve for the communication of the orbicular motion. But they have not always been empty, and we perceive motions, of which at present no natural causes can find place, but which are remains of the most ancient rude state of nature.

From this observation I shall take but another step, in order to approach to a probable conception of the manner of beginning of these great masses and of the cause of their motions, whilst I leave to the inquiring reader himself the more solid finishing of a faint representation. When therefore the matter for the formation of the sun and all the heavenly bodies, which are at the command of his powerful attraction, was diffused through the whole space of the planetary world, and there was perhaps in the place which the sun's mass now occupies matter of stronger powers of attraction, an universal gravitation hereto arose, and the attraction of the solar body increased with its mass. It may be easily presumed that in the universal fall of the particles themselves from the remotest regions of the fabric of the world the substances

substances of a denser nature in the deep regions, where every thing crowded to the common centre, were accumulated in proportion as they were nearer to the centre, though in all the regions there were substances of every degree of density. For only the particles of the heaviest sort could have the great faculty in this chaos to press through the multitude of the lighter, in order to arrive at a greater proximity to the point of gravitation. In the motions which sprang in the sphere around from falls of a different height, the resistance of the particles impeding one another could never be so perfectly equal, that the acquired velocities would not incline to some one side or other. And in this circumstance is manifested a very common rule of the reaction of substances, that they drive or bend and limite one another, till they are of the least impediment to one another; conformably to which the side motions were finally obliged to unite themselves in a common revolving towards the same region. By consequence the particles of which the sun is formed arrived at him with this side motion, and the sun, formed of this matter, must needs revolve in the very same direction.

From the laws of gravitation, however, it is clear that in this mundane matter, thus agitated, all the parts must have endeavoured to intersect the plane, which in the direction of their common revolution goes through the centre of the sun, and which according to our conclusions coincides with the equatorial plane of this celestial body, unless they were already

in it. Consequently all these parts chiefly near the sun have their greatest accumulation in the space which is near his lengthened equatorial plane. In short, it is very natural that, as the particles either impede or accelerate one another, in a word, push or drive one another till the one can no longer disturb the motion of the other, at last every thing falls into the state, that only those parts, which have exactly the degree of side motion that is required at the distance in which they are from the sun to hold the gravitation in equipoise, in order that every one may roll in a free motion in concentric circles, remain floating. This velocity is an effect of the fall, and the side motion a consequence of the counterpercussion continuing till every thing shall have naturally fitted itself for the constitution of the smallest impediment. The other particles, which could not attain such a measured exactness, must by a gradually decreasing motion have sunk to the centre of universal gravitation, in order to augment the sun's mass, which therefore has a density pretty equal to that of the other substances, one with another, in the space around him; yet so, that according to the adduced circumstances their mass of necessity far exceeds the quantity of matter which remains floating in the district around them.

In this state, which seems to me to be natural, where a diffused matter for the formation of different heavenly bodies, in a narrow space next to the lengthened plane of the solar equator, is the denser the nearer to the centre,
and

and revolves every where according to the central laws to great distances round the sun with a motion sufficient at this distance for the free circular motion, if it is taken for granted that out of these particles planets formed themselves, they could not but have motive powers, by which they must move in orbits that approach very nearly to circles, though they deviate somewhat therefrom, as they formed themselves of particles from different heights. It is likewise very natural that those planets, which form themselves at great heights, (where the space around them is much greater, which occasions that the difference of the velocity of the particles exceeds the force with which they are drawn to the centre of the planet,) there acquire greater masses than near the sun. The agreement with many other curiosities of the planetary world I pass over, because it naturally presents itself.* In the remotest parts of the system and chiefly at great distances from the plane of reference the bodies forming themselves, the comets, cannot have this regularity. And thus, after every thing has united itself in separate masses, the space of the planetary world will become void. Yet in later epochs from the utmost boundaries of the sphere of attraction may have sunk particles, which for the future

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* The formation of a smaller system that as a part belongs to the planetary world, like Jupiter and Saturn, as also the turning upon the axes of these celestial bodies are on account of analogy comprehended under this explication.

may in celestial space always move freely in orbits round the sun. Substances of the greatest rarity and perhaps the substance of which consists the light of the zodiac.

4.

Scholion.

The chief design of this contemplation is to give an example of the procedure, to which our antecedent proofs have authorized us, by removing the ungrounded apprehension, as if every explanation of a great disposition of the world from universal laws of nature should make a breach in the fortifications of religion for its wicked enemies to enter into. The adduced hypothesis, in my opinion, has at least grounds enow for itself to invite men of enlarged understandings to a closer examination of the plan (which is but an imperfect sketch) therein represented. My end, so far as it concerns this publication, is accomplished, if one, prepared by the confidence in the regularity and order, which may flow from universal laws of nature, opens a free field but to natural philosophy, and can be induced to consider a mode of explication, like this or any other, as possible and harmonizing with the cognition of a wise God.

It would be worthy of a philosophical effort, after the vortices, the favourite instrument of so many systems, have been banished without the sphere of nature to Milton's Limbo or paradise of fools, to inquire sufficiently whether nature herself does not offer something,

thing, which can, without feigning particular powers, explain the centrifugal motion of the planets directed entirely to one region, since the other motion of the central powers in gravitation is given as a durable band of nature. At least this plan, sketched by us, does not swerve from the rule of unity, for even this centrifugal power is considered as a consequence of gravitation, as is suitable to contingent motions, for these are consequences of the powers inherent in matter even at rest.

I have besides to observe that the atomical system of Democritus and Epicurus, notwithstanding the first appearance of similarity, has a quite different reference to concluding an Author of the world, than the delineation of our system. In that the motion is eternal and without an author and the conjunction, the rich source of so much order, a chance, of which no ground is any where to be found. In this a known and true law of nature conducts, according to a very comprehensible presupposition, of necessity and with order, and as a determining ground of a bias to regularity is here to be met with, and something that keeps nature in the track of consistency and beauty, so one is led to the presumption of a ground, from which the necessity of the reference to perfection may be understood.

In order however by another example to render comprehensible, How the effect of gravitation in the conjunction of diffused elements is necessarily determined to produce regularity and beauty, I shall add an exposition

of the mechanical mode of generation of Saturn's ring, which methinks has as much probability, as can be expected from an hypothesis. Let it be granted me, only, that Saturn in the first age of the world was surrounded by an atmosphere, such as is seen about several comets, which do not approach very near to the sun, and appear with trains, that the particles of the atmosphere ascended from this planet (to which we shall allow a rotation upon the axis), and that afterwards these vapours, whether it be that the planet cooled, or from other causes, began to descend to him again, the rest followed with mechanical accuracy. For as all the particles from the point of the surface where they arose must have a velocity equal to this place to move round the axis of the planet, so all of them by means of this side motion must have endeavoured to describe according to the rules of the central powers free orbs round Saturn.* But all those particles, whose velocity has not the very degree, which by centrifugal power exactly holds the balance of the attraction of the height where they float, must of necessity strike against and retard one another, till only those, which can roll according to central laws in a free circular motion, remain moved round Saturn in orbits, the others, however, fall back by degrees to his surface.

Now

* According to the presupposition, Saturn moves upon his axis. Every particle that ascends from him must therefore have the very same side motion and, whatever height it may attain, continue it.

Now all these circular motions must necessarily intersect the lengthened plane of Saturn's equator; which is known to every body, who is acquainted with the central laws; thus the other particles of his former atmosphere finally press round Saturn to a circular plane, which occupies the lengthened equator of this planet, and whose outermost edge is cut off by the same cause, as in the comets determines the boundary of the atmosphere. This *limbus* of freely moved mundane matter must necessarily become a ring, or rather the said motions cannot terminate in any other figure than that of a ring. For as they can all have their velocity for a circular motion but from the points of the surface of Saturn, whence they arose, those which arose from his equator possess the greatest velocity. As now of all the distances from his centre there is but one, where this velocity is exactly apposite to the circular motion, and at every smaller distance is too weak, so a circle may be described in this limbo from the centre of Saturn, within which all the particles must sink to the surface of this planet, but all the others between this circle and that of his outermost edge (consequently those contained in a circular space,) henceforward remain in motion round him freely floating in circular orbits.

After such a solution one arrives at consequences, by which the time of Saturn's turning upon his axis is given, and indeed with so much probability, that these grounds, by which it is at the same time determined, are granted.

granted. For, as the particles of the internal edge have the same velocity as those which a point of Saturn's equator has, and over and above this velocity according to the laws of gravitation has the degree suitable to a circular motion, so from the relation of the distance of one of Saturn's satellites to the distance of the internal edge of the ring from the centre of the planet, as also from the given time of the revolution of the satellite, may be found the time of the revolving of the particles in the internal edge, but from this and the relation of the smallest diameter of the ring to that of the planet, this his rotation about his axis. And thus is found, by calculation, that Saturn must turn upon his axis in 5 hours and about 40 minutes, which, when the analogy with the other planets is consulted, seems to harmonize well with the time of their revolving.

And now whether the presupposition of the cometary atmosphere, which Saturn may have had in the beginning, be granted or not, the inference, which I thence drew for the illustration of my chief position, remains, meseems, pretty secure: that, if such an atmosphere was around him, the mechanical generation of a floating ring must be a necessary consequent thereof, and that therefore the issue of nature left to universal laws, tends even from the chaos to regularity.

CON-

CONTEMPLATION THE EIGHTH.

OF THE DIVINE ALSSUFFICIENCY.

The sum of all these contemplations leads us to a conception of the Supreme Being which, when men made of dust venture to look behind the curtain that conceals from created eyes the mysteries of the Inscrutable, comprehends in itself every thing possible to be thought. God is all-sufficient. What exists, whether it be possible or actual, is but something, so far as it is given by Him. A human language may let the Infinite speak to himself thus, *I am from eternity to eternity, besides me there is nothing, something is but so far as it is through me.* This thought, the most sublime of any is yet much neglected, or for the most part not touched on. That which in the possibilities of things presents itself for perfection and beauty in excellent plans, is to be considered as of itself a necessary object of the Divine wisdom, but not as a consequence of this incomprehensible Being. The dependence of other things has been limited to their existence merely; whereby a great share in the ground of so much perfection is taken away from that Supreme Nature and attributed to I know not what eternal nonentity.

Fruitfulness of a single ground in many consequences, harmony and aptitude of natures to be congruent in a regular plan according to universal laws without frequent collision, must first be met with in the possibilities

bilities of things, and then only can wisdom be active in choosing them. What limits would be set to the Independent from a foreign ground, if even these possibilities were not grounded in him? And what an unintelligible fortuitousness is to be found in this field of possibility, without presupposing some One existing, unity and congruity, by which the Being of the highest degree of potency and wisdom, when those external relations are compared with his internal faculty, seeth himself able to effectuate great perfection? Certainly such a representation never delivers the origin of the good without all detriment into the hand of a single being. When Hugen invented the pendulum of a clock, he could never, if he thought on't, totally attribute to himself that uniformity which constitutes its perfection; the nature of the cycloid only, which makes it possible that small and great arcs are described in it in equal time by a free fall, could put this performance in his power. That from the simple ground of gravitation so great a compass of beautiful consequences is even but possible, would, did it not depend upon him who hath produced all this connexion by actual execution, manifestly lessen and divide his part in the charming unity and the great compass of so much order deriving from one single ground.

The admiration of the consequence of an effect ceases the moment I distinctly and easily perspect the sufficiency of its cause. Thus, when I contemplate the mechanical structure of the human body, or any artificial disposition

tion whatever, as a work of the Almighty, no admiration more can find place; For it is to be easily and distinctly understood That He who can every thing, may likewise produce such a machine when it is possible. But, though this may have been adduced for the purpose of comprehending more easily, there still remains cause for admiration. For it is astonishing that such a thing as an animal is even possible. And though I could fully perspect the nature of fethers and tubes, of all the nervous vessels, of the lymphatics, of the lever and mechanical arrangement of it; how it is possible that so manifold performances could be united in one structure, how the different works in order to one end are so well suited to that by which another end is attained, how the very same conjunction serves over and above to preserve the machine and to repair the consequences of accidental injuries, and how it is possible that a man can be of so fine a texture and, notwithstanding so many grounds of destruction, last so long, are all objects of admiration. Though I have finally informed myself that so much unity and harmony are possible, because there exists a Being, who compriseth together with the grounds of actuality those also of all possibility, this does not yet annul the ground of admiration. For a conception may, it is true, be formed by the analogy with what men exercise, how a being can be the cause of something actual, but never how it comprehends the ground of the internal possibility of other things, and it seems as if this thought

thought soared too high to be reached by a created being.

This high conception of the Divine nature, when we conceive of it according to its al sufficiency, can, even in the judgment on the quality of possible things, where immediate grounds of decision are wanting to us, serve for no expedient to conclude from it as a ground foreign possibility as a consequence. The question is, Whether among all possible worlds, as no natural order at all is possible above which still a more excellent may not be thought, a rising without end is not to be met in the degrees of perfection; again, if I should herein grant a highest degree, Whether there are not at least different worlds, which are surpassed by none, quite equal to one another in perfection? With such questions it is difficult and perhaps impossible to decide any thing from the contemplation of possible things only. But, when I weigh both problems in connexion with the Divine Being, and cognise that the preference of the choice, which the one world has before the other, may be gathered without the preference in the judgment of the same being that chuses, or even contrary to this judgment, a want in the agreement of this different active powers and a different reference of his efficacy, without a proportionate difference in the grounds, consequently a deformity in the most perfect Being, I conclude with great conviction That the proposed cases must be feigned and impossible. For according to all the preparations which have been seen I comprehend

prehend That there is much less ground, from presupposed possibilities, which cannot however be sufficiently ascertained, to conclude a necessary conduct of the most perfect Being, (which is of such a nature, as to seem to lessen the conception of the greatest harmony in him) than from the cognised harmony, in which the possibilities of things must be with the Divine nature, from what is cognised to be the most suitable to this Being to conclude the possibility. I therefore presume that in the possibilities of all worlds there can be no such relations, as must contain a ground of the embarrassment in the rational choice of the Supreme Being; for this very Supreme Being containeth the last ground of all this possibility, in which, then, nothing else, than what harmonizes with its origin, can be met with.

This conception of the Divine *alsufficiency* extended beyond all that is possible and actual is a much more correct expression, to denote the greatest perfection of this Being, than that of the *Infinite*, which is commonly used. For though the latter may be interpreted as one pleases, it is according to its proper signification manifestly mathematical. It denotes the relation of one quantity to another as the measure, which relation is greater than all number. Hence in the proper sense of the word the Divine cognition would be denominated *infinite*, so far as it, comparatively with any other cognition possible to be proposed, has a relation, which transcends all possible number. As now such a comparison of Divine designations with those of created

Vol. II. Z things

things reduces to a homogeneity which cannot be well maintained, and besides does not directly give to understand that which is thereby meant, namely, the undiminished possession of all perfection; so, on the contrary, all that is possible to be thought on this is found united in the word, alsufficiency. The appellation, infinity, however, is beautiful and, correctly speaking, asthetical. The enlarging beyond all conceptions of number moves, and by a certain embarrassment fills the soul with astonishment. Whereas the word we recommend is more suitable to the logical accuracy.

SECTION

SECTION III.

WHEREIN IS SHOWN THAT BESIDES THE
ADDUCED ARGUMENT NO OTHER FOR A DE-
MONSTRATION OF THE EXISTENCE OF
GOD IS POSSIBLE.

1.

*Division of all possible Arguments in Support
of the Existence of God.*

The conviction of the great truth, *there is a
God*, if it shall have the highest degree of
mathematical certainty, has this peculiar to
itself, That it can be attained but in one way
and gives this contemplation the preference,
that the philosophical efforts must unite them-
selves in a single argument, in order rather
to correct the faults, which may have slipped
into the prosecution of it than to repudiate it,
as soon as one is convinced that no choice
among other arguments of the same sort is
possible.

In order to shew this I have to notice that
the postulation, which is to be fulfilled, must
not be lost sight of, namely, not to evince
the existence of a very great and very perfect
first cause, but of the Supreme Being, not
the existence of one or more supreme beings,

but of One only, and this not by great grounds of probability, but with mathematical evidence.

All arguments for the existence of God can be taken but either from the intellectual conceptions of the merely *possible*, or from the conception of the *existing* taken from experience. In the former case is concluded either from the possible as a *ground* the existence of God as a consequence, or from the possible as a *consequence* the Divine existence as a ground. In the latter case, on the other hand, is collected either from that, whose existence we experience, the existence of a first and *independent cause* merely, but by means of the anatomizing of this conception his Divine attributes, or from what experience teaches are immediately inferred as well his existence as his *attributes*.

2.

Proof of the Arguments of the former Sort.

If from the conception of the merely *possible* as a ground shall be concluded the existence as a consequence, the said existence must be to be therein found by the dissection of this conception; for there is no other derivation of a consequence from a conception of the possible than by the logical solution. But then the existence must be comprised in the possible as a predicate. As this now according to the first contemplation of the first section never finds place, so it is evident That

a proof of the truth of what we are speaking is in the aforesaid manner impossible.

We have a famous proof, however, built upon this ground, named the Cartesian. Let a conception of a possible thing, in which is represented united all true perfection, be first imagined. Now let it be supposed that existence is likewise a perfection of things; therefore from the possibility of a perfect being is concluded his existence. In the same manner from the conception of every thing, which is represented but as the most perfect of its species, for instance, thence only because a perfect world is conceivable, may its existence be concluded. But without embarking in a circumstantial refutation of this proof, which is already to be met with in other works, I refer but to that which is explained in the beginning of this treatise, namely, that existence is by no means a predicate, consequently no predicate of perfection neither, and hence from an explication, which contains an arbitrable union of different predicates, in order to make up the conception of any one possible thing, can never be concluded the existence of this thing and therefore not the existence of God.

Whereas, the conclusion from the possibilities of things as consequences of the existence of God as a ground, is quite of another nature. Here is investigated, whether, in order that something may be possible, some one existing thing must not be presupposed, and whether that existence, without which even no internal possibility has place, does

not comprehend such properties as we combine in the conception of the Divinity. In this case it is first of all clear that, unless I presuppose the existence of that which is possible but on certain conditions, I cannot conclude an existence from the contingent possibility, for this gives only to understand that something can exist but in certain connexions, and the existence of the cause is shown but so far as the consequence exists, but here it must not be concluded from its existence, hence such a proof, provided it find place, can be made from the internal possibility only. Further, it is perceived that it must spring from the absolute possibility of all things in general. For it is but the internal possibility itself of which must be cognised that it presupposes some one existence and not the particular predicates by which one possible thing distinguishes itself from another; for the distinction of predicates takes place in the merely possible too, and never denotes any thing existing. Therefore in the abovementioned manner from the internal possibility of all that is cogitable must be gathered a Divine existence. That this can be done, has been shown in the whole first section of this work.

3.

Proof of the Arguments of the latter Sort.

The proof, by which is inferred from the conceptions of experience from what exists to the existence of a first independent Cause according to the rules of causal conclusions, but

but from this by logical dissection of the conception to the properties of that which denotes a Deity, is celebrated and brought into high repute chiefly by the school of Wolfian philosophers, it is however totally impossible. I grant that every thing is regularly inferred as far as the position, *if there exists something there likewise exists some thing that depends not upon any other thing*, I grant too that the existence of any one or more things, which are not effects of another thing, is clearly evinced. Now the second step to the position, That this independent thing is *absolutely necessary*, is much less certain, as it must be conducted by means of the position of sufficient reason, that is still impugned; but I make no hesitation to subscribe every thing as far as this. Consequently there exists something of absolute necessity. From this conception of the absolutely necessary Being must now be derived his attributes of the highest perfection and unity. But the conception of absolute necessity, which here forms the basis, may, as has been shown in the first section, be taken in a twofold manner. In the one, as it is named by us the logical necessity, must be shown that the contrary of that thing, in which is to be met with all perfection or reality, is inconsistent with itself, and that that being only, whose predicates are all truly affirmative, is absolutely necessary in existence. And as from the very same thorough union of all reality in one Being must be concluded that he is *one*; it is clear that the anatomizing of the concep-

tions of the necessary rests upon such grounds, according to which I must be able conversely to conclude, that that, wherein all reality is, necessarily exists. Now this mode of conclusion is not only impossible according to the preceding number, but it is particularly remarkable that in this manner the proof is not at all built upon the conception of experience, which is presupposed without making the least use of it, but is like the Cartesian from conceptions only, in which the existence of a being is imagined to be found in either the identity or the collision of the predicates.*

It is not my intention to dissect the proofs themselves, which dissection may be seen in several authors conformably to this method. It is easy to detect their paralogisms, and this detection has already been made in part by others. As it may still be hoped, however, that their faults are to be corrected, it may be perceived from our contemplation that, whatever be done to them, they never can become any thing else than conclusions from conceptions of possible things, but not from experience, and, whatever happens, are therefore to be numbered with the proofs of the former sort.

As to the other proof of that sort, where from

* This is on what I chiefly proceed here. When I place the necessity of a conception in the contrary's contradicting itself, and then maintain that the infinite is of such a nature, it is quite unnecessary to presuppose the existence of the necessary Being, as it follows from the conception of the infinite. Nay, that presupposed existence is in this proof even totally idle. For as in its progress the conceptions of necessity and of infinity are considered as alternate conceptions, so from the existence of the necessary is actually concluded infinity, because the infinite (and indeed it only) necessarily exists.

from conceptions of existing things taken from experience the existence of God and at the same time his attributes are concluded, it is quite otherwise circumstanced. This proof is not only possible, but in every respect worthy to be brought by united efforts to due perfection. The things of the world that discover themselves to our senses, show as well distinct criteria of their contingency, as, by the greatness, the order and dispositions conformable-to-end, every where to be perceived, proofs of a rational Author of great wisdom, and potency, and goodness. From the great unity in a whole so extensive may be collected that there is but a single Author of all these things, and though in all these conclusions no geometrical strictness is conspicuous, they indisputably contain so much energy, that, according to rules which the natural sound understanding follows, they leave not a moment's doubt to any reasonable person.

4.

*In general there are but two Proofs of the
Existence of God possible.*

From all these judgments is to be learned that, if one would conclude from conceptions of possible things, no other argument for the existence of God is possible, than that, in which even the internal possibility of all things is considered as something that presupposes some one existence; as was done in the first section

of this work. As also it is evident that, if from what experience teaches us of existing things the conclusion shall amount to the very same truth, the proof can be given of the existence as well as of the quality of the chief Cause but by the properties perceived in the things of the world and the contingent disposition of the universe. May I be allowed to name the former proof the ontological, and the latter the cosmological?

This cosmological proof, meseems, is as old as human reason. It is so natural, so engaging and enlarges one's reflection so much with the progress of our introspections, that it must last as long as there is any one rational creature, who wishes to take part in the noble contemplation, to cognise God from his works. The endeavours of Derham, Nienwentyt and many others have with this view, though sometimes intermixed with much vanity, to give by the signal of religious zeal a venerable appearance to all sorts of physical knowledge or even to fancies, done honour to human reason? Notwithstanding all this excellence this mode of proof is still incapable of mathematical certainty and exactitude. Only some one incomprehensibly great Author of that whole which presents itself to our senses may always be concluded, but not the existence of the most perfect of all possible beings. It is the greatest probability in the world that there is but one first Author, but this conviction wants much of the fulness, which dares the boldest scepticism. That occasions that we cannot conclude
more

more or greater properties in the cause, than we find directly necessary in order thence to understand the degree and quality of the effects; when we have no other occasion to judge of the existence of this cause, than what the effects give us. Now we cognise much perfection, greatness and order in the world, and cannot thence conclude more with logical strictness, than that their cause must possess much understanding, potency and goodness, but by no means that it is omniscient, omnipotent &c. It is an immense whole in which we perceive unity and thorough connexion, and we may thence conjecture with great reason that there is but one Author of it. But we must acknowledge that we do not know all that is created, and hence judge that, what is known to us bespeaks but one Author, from which we presume that what is unknown to us is of the very same nature; which indeed is very rationally thought, but does not conclude strictly.

On the contrary, unless we flatter ourselves too much, our projected ontological proof seems to be susceptible of that mathematical strictness, which is required for a demonstration. Were it the question, however, which of the two in general is the best, the answer would be, Whenever logical exactness and completeness are upon the carpet, it is the ontological proof, but if comprehension to the common just conception, liveliness of impression, beauty and the power of moving the moral springs of human nature, the preference is to be granted to the cosmological.

logical. And, whilst at the same time sound understanding is convinced, as it is without doubt of more importance to animate men with high feelings, which are fertile in noble activity, than to instruct in carefully weighed syllogisms, with a view to satisfy the more refined speculation, so, when the procedure is sincere, the preference of the more general usefulness cannot be refused to the known cosmological proof.

It is therefore no flattering artifice that courts the approbation of others, but sincerity, when, to such an amplification of the weighty cognition of God and of his attributes, as Reimarus delivers in his book on Natural Religion, I willingly grant the preference of usefulness before every other proof, in which logical strictness is more considered, and of course before mine. For without taking into consideration the value of this and other writings of this man, which chiefly consist in an unartificial use of a sound and beautiful reason, such grounds have actually great force of argument and excite more intuition, than the logical abstract conceptions, though these give to understand the object more exactly.

Yet as a searching understanding, when it has once fallen on the track of investigation, is not satisfied till every thing around it is light and, if I may so express myself, till the circle that bounds its question is quite closed, so nobody will hold useless and superfluous an endeavour which is, like the present, employed about the logical exactitude in a cognition so very momentous, especially as there
are

are many cases, wherein without such care the application of its conceptions would remain insecure and doubtful.

6.
*There is but one Demonstration of the Existence
of God possible, in Support of which the
Argument is above given.*

From the foregoing it is evident that among the four imaginable arguments, which we have reduced to two principal sorts, the Cartesian as well as that from the conception of existence taken from experience carried on by means of the solution of the conception of an independent thing, is false and totally impossible, that is, these arguments are not only not proved with sufficient strictness, but they are not at all proved. It has been farther shown that the proof, from the properties of things of the world to conclude the existence and the attributes of the Deity, involves an apposite and a very beautiful argument, only that it is never capable of the strictness of a demonstration. Nothing now remains but that either no strict proof of this whatever is possible, or that it must rest upon that argument, which we have above adduced. As the possibility of a proof is absolutely the subject of present inquiry, nobody will maintain the former, and the issue is conformable to what we have pointed out. There is but one God and only one argument, by which it is possible to per-
spect

spect his existence with the perception of that necessity, which absolutely destroys all that is contrary. A judgment, to which even the quality of the object might immediately lead. All other things that exist any where might also not exist. The experience of contingent things, therefore, cannot yield an argument fit for cognising the existence of him, of whom it is impossible that he should not exist. Only in this, that the negation of the Divine existence is absolutely nothing, lies the distinction of His existence from that of other things. The internal possibility, the essence of things is that, whose annulling destroys all that is cogitable. Herein then consists the proper criterion of the existence of the Being of all beings. In this seek the proof and, when you are of opinion not to find it here, turn from this unbeaten path to the broad highway of human reason. It is absolutely necessary to convince one's self of the existence of God; but it is not just so necessary that it should be demonstrated.*

THE

RELIGION

WITHIN THE SPHERE OF

NAKED REASON.

Let us remove from devotion all those mistakes, to which the corruptions of men, or their ignorance and prejudices, have given rise. With us let it be the worship of God, *in spirit and in truth*; the elevation of the soul towards him in simplicity and love. Let us pursue it as the principle of virtuous conduct, and of inward peace, by frequent and serious meditation on the great objects of religion; let us lay ourselves open to its influence. By means of the institutions of the Gospel, let us cherish its impressions.

BLAIR, *On Devotion.*

W. H. R. S. O. N.

THE
RELIGION
WITHIN THE SPHERE OF
NAKED REASON.*

REPRESENTATION OF THE CHRISTIAN RELI-
GION AS A MORAL RELIGION.

The category MORAL LIBERTY has been already represented (in *The Principles of the critical Philosophy*) as a moral predisposition in man [an original laying down of the causality of the will as independent upon every determination of nature, that is, every material determinative of the will]. But, between this moral predisposition and the morally good will the distinction is very great. Only that will, which is divested from

* This treatise, extracted, at the translator's request, by professor Beck, out of Kant's great work bearing this title, was published as the fourth part of *The Principles of the critical Philosophy*, but, several inaccuracies, which disfigure it, having unfortunately crept in, the translator deemed a subject of such sublimity and importance worthy of this revision.

from sensitive determinatives, is morally good.

All moral religion, however, consists in the reflection of the virtuous man on nature, wherein he expects that it will correspond to the moral worth of mankind, which expectation cannot be grounded but in the conception of nature as a whole, and consequently its reference to a moral Author of the world. The conception of this is indeed transcendent, like that of the intellect which, as the Author of organized beings, we have in thought in the judgment of them. But, as the conception of the thing that harmonizes with and develops itself conformably to the unity of end has meaning; so has meaning the expectation of the virtuous, who promises himself from nature, contemplated as a whole, that, which the part he inhabits affords not.

From this arises an aspect of revealed religion, so named, as a moral religion. Its phenomenon in the world is an event of nature, and as such completely determined by causes natural. Thus is circumstanced every alteration which the establishment of Christianity has occasioned.

So far, however, as we refer nature in general to a moral Author of nature, in this reference we shall comprehend that phenomenon too, so conformable to the moral destination of man. As the generation, the growth, the nutrition of the plant, is an event of nature, and yet we can by no means do without the conception of a cause according to ends (as a principle, quite different from

from the mechanism of nature, and which even uses this mechanism,) in order but to think of the plant as an organized being, and to distinguish it from other things by a criterion; so may the gospel, though its phenomenon is but an event of nature, be referred to a principle, different from it, and which has for its end the producing of moral order in nature.

Thus have we given a conception of revelation, which no doubt has signification, though but moral and not theoretical. We shall now represent it more at large in this form: Man is, *first*, on account of his moral predisposition, a moral being and cogitable as such by a conception, whereby we separate him from nature. But he is, *secondly*, an object of nature at the same time. Notwithstanding all that moral principle of man, experience teaches us to know him as morally bad, that is, as a being, who subsists not independently upon sensual determinatives, but who frequently discovers himself a slave to his inclinations. We shall therefore represent, as a position of experience, that a *bad principle* is to be found in man (or in humankind) beside that *good principle* of the moral predisposition itself. If it is right that every person, with the earliest manifestations of his consciousness, makes his inclinations the chief principle of his actions, the morality of mankind (as an object of experience) can commence but with a *conflict of the bad principle with the good one that dwells by it*. Now the victory of the good principle in man over the bad is what constitutes

tutes in him the morally good quality. But the morally good man, as a necessitous being, always remains exposed to be governed by the bad principle, yet *the dominion of the good principle over the bad in mankind in general* is for every one a foundation to fortify in a morally good way of thinking and likewise for its duration. That the Christian Religion, as a stable proof that the good principle has stricken root in mankind in general, is to be considered as a testimony of the dominion of the good principle over the bad, will be evinced in the sequel of this treatise.

1.

Of the Dwelling of the bad Principle by the good, or on the radical Bad in human Nature.

As the position, man is *by nature good*, or he is *by nature bad*, seems to involve a contradiction, we shall represent its sense more clearly. When the moral quality, and not the moral predisposition, of man, is in question, one thinks of that which is to be imputed to him, whereof the mere possibility only is thought in the conception of his moral predisposition. This moral quality, which man originally gives himself, is then meant, when it is judged that he is either good or bad. To be by nature good or bad, would be contradictory, if by nature were understood the ground of the quality, that is quite foreign

to

to the person himself and found without him. But when we say either the one or the other of man, it is but with a view to point out, that, as the last ground of the moral quality of mankind is entirely hidden from us, he, with the first manifestations of his consciousness, appears to us either morally good, or morally bad. This last ground of his moral quality, however, by virtue of his moral predisposition (his personality), lies not less in him entirely, and this quality must not be the less imputed to him. But the expression of the innate moral character of man must be understood as the mere incomprehensibility of the first ground of the moral quality. Therefore the position, man is by nature good, or he is by nature bad, or, his moral character is innate, says nothing more nor less, than that the first principle of the adoption of legal or of illegal maxims is inscrutable to us, and man himself, should he trace this ground to even his earliest youth, would not be capable to discover it.

But though the meaning of the expression, man is by nature good, or bad, is shown, it may be asked, whether, man is by nature *either* good *or* bad, be a proper disjunctive position. This question cannot be answered but when it is compared with the principle of all moral conceptions. As a morally good cast of mind is totally different from that which consists in the intention of making the bare legality of actions the highest maxim of the will, so one of them only can be of validity, man has either made, or not made, this

mere legality the highest maxim of his will, and can therefore be but one of them, either morally good, or morally bad. Consequently if we hold up to the transcendental station of all moral judgment, as well the position, man is by nature neither good nor bad, as, man is by nature both, at the same time, (in some points good, in others bad,) it is obvious that all practical import is wanting to both. Those, who incline to that severe manner of thinking, the exclusion of a third, namely, the position, man is either good or bad, are named *rigorists*, and their antipodes may be denominated *latitudinarians*; these are either latitudinarians of neutrality, and may be termed *indifferents*, or of coalition, and may be distinguished by the appellation of *syncretists*.

Before the tribunal of the practical reason, man, according to his *intelligibilis* character, thought by a conception, whereby we separate him from nature, is, then, by nature, either good or bad. This conception allows no mean, because man is not thereby thought as an object of experience, but by a mere idea, which has no theoretical signification. If however we contemplate in man his empirical character, *id est*, himself as an object of experience, he appears to us as a being affected by inclinations, which intrude upon him as first determinatives of his will. Under this conception now he may easily be thought as in some points good and, at the same time, in others bad, as the moral cast of mind, that is, the independence of the will upon material deter-

determinatives, in man in experience, necessarily has a degree, and by consequence he may grow morally better, than he is at every instant. Both positions, man is by nature bad and good at the same time and, man is by nature neither good nor bad, are valid with men as objects of experience. The former says that every one, from his earliest youth, finds himself in a certain, somewhat greater, somewhat smaller degree of receptibility of a morally good way of thinking; but the latter, that the moral state and imputableness of man are something, which arose in him.

Man is, first, an *animal*, secondly, a *rational being*, thirdly, *capable of imputation*, *id est*, a *moral being*. So far as he is the last (a person), does he possess the receptibility of reverence for the moral law, as of itself a sufficient spring of the arbitrement. The personality itself can be thought but as a predisposition to proper worth. It is the possibility to be either morally good, or morally bad. Only of the two first predispositions (animality and humanity) can it be said that vice may be grafted upon them; not of the last, as this contains but the possibility of being wicked. The predisposition to animality in man is threefold, *first*, to self-preservation, *secondly*, to the propagation of the species, *thirdly*, to intercourse with other men, that is, the instinct for society. These predispositions are not bad in themselves, but moral bad may be grafted upon them, to wit, when man, by virtue of his personality, makes these instincts the chief determinatives

of his will. The vices so arising are termed those of the rudeness of nature and, in their greatest deviation from the end of nature, they are named *brutal vices: gluttony, voluptuousness, and savage licentiousness*. The predisposition to humanity itself is likewise not bad. In it lies the inclination to procure one's self a worth in the eyes of others. Is this inclination itself, however, the chief determinative of the will? then, man loses as much proper worth, as he believes to gain in the opinion of others. The vices grounded upon this inclination are denominated vices of culture, and, in the highest degree of their depravity, *diabolical vices*.

Vices may thus be grafted upon the predispositions in man to animality and to humanity, yet these themselves are not morally bad. Should we find a principle for the bad in mankind so early as the first manifestations of consciousness, namely, a principle to make the gratification of the inclinations the chief maxim of the will, such a principle would be styled a *propensity* to the bad, which, though it lies in the human nature itself, is different from a predisposition. A predisposition in man is thought as belonging to his very being, and this can be termed neither morally good nor bad. But though that propensity to the bad is represented as inborn in man, he must not be the less thought as capable of imputation, since this inborn denotes but the unintelligibility of this principle. This unintelligibility is nothing else, than what lies in the conception of man as a moral being
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in general, wherein we remove him from nature (the complex of all that is intelligible, of course comprehensible) and cogitate him as the absolutely first cause of the maxims of his will. A propensity to the bad is therefore an *act*, and not to be commuted with a physical propensity, that is, with a mere predisposition in human nature, or with an inclination grounded thereupon. This propensity to the good or to the bad in the human nature is that which is denominated the *good*, or the *bad heart*.

Speaking here of the bad heart, or of the propensity to the bad, we mean, as it can be an object of experience, and as such it may present itself in three different degrees. *First*, as a *fragility* or frailty of human nature, that is, as a weakness in the following of adopted maxims; *secondly*, as an *impurity* or *improbability*, that is, as a propensity to the mixing of immoral with the moral springs, insomuch that, not as it ought to be, the mere reverence for the law, but, and that perhaps in all cases, still other springs are necessary, in order to determine the will to legal actions; *thirdly*, as a *vitiosity*, *pravity* or *corruption* of the human heart, that is, as a propensity to the adoption of bad maxims. In the last consists the highest degree of the natural propensity to the bad, which is a principle of overthrowing moral maxims and so of the destruction of the reverence for the law. But how legal soever a man's actions may always be, he is, so long as the mere moral law is not the sole determinative of his will, but a

man of good morals, and not a morally good man.

The propensity to the bad (the radical bad) in human nature, has not its ground in the sensitiveness of mankind. The inclinations by which man is affected, can be conceived but as the touchstone of the degree of the moral cast of mind (as it reveals itself in experience), which, however, subsists of itself independently of such trials, that serve no other purpose, than to the empirical assurance of the proper moral strength. It happens that men believe themselves morally good, as the opportunity only has been wanting to commit illegal actions, and as outward circumstances have protected them from the springing up of certain inclinations, (which is however not their doing), because they have not in view the proper point of morality, but put the mere legality of actions only in the place of the morality, they often believe, therefore, to be morally better than others, when they have but more fortunately escaped the bad consequences of their actions.

The natural propensity in man consists just as little in the maxim, to perform illegal actions, merely because they are illegal. Herein consists the conception of wickedness that renders the subject a diabolical being, but which conception is not applicable to man. Man, however, though he acknowledges the authority of the moral law, and is but herein (in the category, moral liberty,) a moral being, is at the same time a sensible being too, under the influence of inclinations, and all moral
bad

bad in him entirely consists in his giving his inclinations the preference to the reverence for the moral law. The propensity in human nature to the bad is therefore to be named a *perversity* only, and not a depravity, of the heart. But, that such a principle of destruction of the maxims and subordination of the reverence for the moral law to the spring of the inclinations is to be found in human nature, experience convinces us. If we take a view of men in a rude state of nature, of a people in a cultivated state, or of the relation which nations bear to one another, as they live in a perpetual state of warfare, and harbour not even the intention of quitting it, we shall find the propensity in man to the bad to reveal itself, insomuch that we must hold it to belong to the character of his species, and therefore innate in him, though he on that account is not less blameworthy.

All experience, however, can teach nothing but that man is *bad*, that is, that he has adopted the occasional deviation from the good as his maxim. But as to the principle of his perversity, the propension to the bad, which is inborn in him, we name it inborn, in order to show that no experience can teach us its origin, but that it is to us incomprehensible. Here now the origin of time must be well distinguished from the origin of reason of the moral bad in man. In the inquiry into the former I remain in the sphere of the intelligible, and there seek the cause of every action which lies in the preceding time, and every action of man (his adoption of every maxim)

maxim) is determined by previous causes. But the conception of morality elevates the subject above the sphere of nature, and in this elevation only is he thought as a person and as a being capable of imputation. Here now consists the origin of reason of the bad, in a causality which, as an event, presupposes no other, the original act, and is independent upon every cause natural. This origin of reason of the moral bad is therefore totally inexplicable, and that, because it lies not in the sphere of the explicable [nature]. The origin of reason of the bad, and how it came into the world, are then inexplicable, and only so far as it is an object in the world (an object of experience, a phenomenon,) does it rank as an event under the law of causality. The bible signifies that inexplicableness in an allegorical narration of the fall of our first parents, in making their seducer a spirit, whose origin and the bad in him lie not in nature. But with regard to the propagation of the evil by inheritance, this notion, as in it is directly annulled the conception of morality, which is the proper act of every person, is absurd.

That man, therefore, is by nature bad and that even in the best men is to be found the principle, the maxim, the occasional overthrowing of all maxims, namely, the subordination of the reverence for the moral law to the springs of the sensitive faculty, may be considered as a position resting upon experience. But as the origin of reason of the moral bad, though it must of necessity be thought,

thought, since in this conception only man in general is cogitated as a moral being, cannot be comprehended, so the origin of reason of the moral good (the return to it, or its re-establishment in man) is equally incomprehensible. Only the phenomenon of this alteration of mind can as an object of experience be comprehensible. This return from the bad to the good is a revolution of the mode of thinking according to the origin of reason, but, according to the origin of time, it is a gradual progression to the better. In the conception of the former, however, and so of man as a moral being, it lies, that this revolution must be his own work. Though the conception of man as a being obnoxious to inclinations, and in his depravation as governed by these sensitive springs, could furnish the conception of a supernatural assistance, in order to recover the original predisposition to the good; the origin of reason of this revolution of the way of thinking of man, whereby he is to be thought as worthy of a supernatural assistance, must be nowhere placed but in himself.

2.

*Of the Conflict of the good Principle with
the bad for the Dominion over Mankind.*

That man has inclinations, therein consists not the moral bad of his nature, and the Stoic was in the wrong to maintain that the moral good in man consists in the combatting
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of his inclinations. The enemy of the good lies nearer to man, namely, in his own person, but the inclinations, on the contrary, belong not originally to himself (they are not his work). The moral bad in man consists not in the inclinations, but in the adoption of the maxim, to subordinate the reverence for the moral law to the spring of the inclinations. From the extirpation of the moral bad, which is man's proper act and to be imputed to him, begins the moral good in man (as he cognises himself in experience), who, how early soever he may direct his attention to his moral state, always finds that the moral bad has already taken place in him.

The bad principle has taken root in every man, and he always cognises himself first as bad, yet he is capable of this cognition by virtue of his moral predisposition only, this comprises the possibility of the good principle, which man, so long as he continues conscious of it, can never lose. Of this good principle the scripture gives an idea personified; only this, humanity in its moral perfection, is it, on whose account the world can be thought as the end of the creation of the Divine will. This man only acceptable to God *was in him from the beginning*. This idea lies in the essence of God and its object is so far not created, but his only begotten son; *the word (the FIAT!) by which all things were made; and without which was not any thing made, that was made.*

The idea of moral perfection lies in every human soul and rests upon the moral principle

ciple [moral liberty] in man. Since we cannot comprehend its origin (we, in this conception, separate man from nature), we may say that this prototype is descended from heaven, and so far he, though holy and therefore obnoxious to no suffering, takes it upon himself in the fullest measure, in order to forward the *welfare* of mankind, who, never free from demerit, are unworthy of this union of the prototype with them, it is named a humiliation of the Son of God.

Only he, who is firm in the *practical belief in this Son of God*, that is, who is conscious to himself that he would be able, like this prototype, to give a similar proof of a morally good mind, to support the greatest suffering, if the good of mankind required it, and that he would steadfastly resist the greatest temptations; only such a person, I say, dares hold himself an object not unworthy of the Divine complacency.

With regard to the reality of this idea of the son of God, it lies in the conception of the moral nature of man, and every one, who, by virtue of the moral liberty in him, agnises himself as a moral being, is at the same time conscious to be able to produce in himself the moral worth, which that idea requires of him. But whoever exacts still more from an example of this idea in experience, than he sees, to whom the innocent and, so much as one can observe, meritorious conduct of a person, is not sufficient, but desires miracles in order to find himself adequate to this idea, shows his unbelief in the son of God, that is, in
virtue,

virtue, and thereby proves the distinction of his own moral value from that which is represented to him by this idea. It is not to be conceived what should render it necessary with a practical view to find more in such an example, than a man naturally created, even under the supposition that he had by means of a revolution produced an infinitely great good among mankind; the supernaturalness of his descent, on the contrary, and so his absolute impossibility to sin, might be a hinderance to the force, which this prototype would have as an example for imitation.

Difficulties however arise concerning the reality of this idea of a son of God, namely, concerning its appropriation, wherein its whole practical morality consists, which difficulties must be solved. The idea requires holiness, that is, perfect harmony of the maxims of our will with the ideal of the moral good. (*Be ye therefore holy, even as your Father which is in heaven is holy*). But the moral quality of man, who always sets out from the bad, from which to holiness the distance is immense, is defective in every finite time. How can man now ever confidently believe to attain that archetype, which is set before him? The answer to this is, As to man's act as a phenomenon, it will constantly discover itself as a progression from bad to better. This constant progression itself, however, rests upon a principle, which consists in the pure sentiment of the heart and is the germe of all good in the phenomenon. On account of this sentiment, provided it have the command and
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be pure in man, he may expect, in whatever instant his existence may be broken off, to be still, in general, acceptable to God.

A second difficulty presenting itself concerning the reality of the son of God is the following. What is it that assures man of the permanency of his good mindedness, which we hold to be in him the principle of the constant advancement to the good? One might indeed address those apprehensive on this head in this manner, *The spirit beareth witness with our spirit, that we are the children of God*, that is, whoever possesses such a pure mindedness as is required, is certain that he never can fall so low as to be once more in love with the bad. But, as man deceives himself in nothing so willingly, as in that which concerns the good opinion of himself, so it seems more advantageous to work out his salvation with fear and trembling. Without a trust in one's self, however, and a confidence in the constancy of one's good mindedness, that permanence would scarcely be possible. The solution of this difficulty can be no other than the following. Nothing but the previous duration of the good principle that is received in the mind, can assure man of its permanency in the subsequent time. He may accordingly hope that, as the force of his mind increases in the progress, he in all probability will never fall back entirely into the bad. He, on the other hand, who is conscious to himself never to have been thoroughly attached to the good, must be apprehensive that the bad is always rooted in

his mind, and that, were his days still prolonged, he would not for all that conduct himself better. Herein consists the objective validity of the conception of a blessed or not blessed eternity; whereas, a dogma of either the finity or the infinity of the punishments or torments of hell would transcend all our cognition and herewith all intelligibility.

A third difficulty concerning the practical validity of the idea of the prototype of the moral good occurs. However pure and good the mindedness of a person may be, and however constant he may have been in it, yet he set out from the bad, and it is not possible for him to do away this demerit. Because he has adopted good sentiments, he has not discharged the debts of his former course of life, and as these must be thought as the most personal of all, they cannot be considered as transmissible, or that another can acquit them in his stead. The question now is, in what state of man can the punishment for his transgressions (the expression of the Divine displeasure with him) be thought executed? So far as he has adopted good sentiments he is a new man and therefore an object of Divine complacency. How can his punishment, as it was not inflicted before his amendment, be now conceived? The solution is as follows. In the state of the alteration of mind itself, wherein he quits the old, and becomes a new man, in the deposing of the inclinations from their sovereignty, and in the establishment of the reverence for the moral law in it, must the discharging

charging of the debt and so the satisfaction of the Divine justice be placed. Though the new man as an object of experience, is the very same who, formerly as the old man, lived in the bad sentiment, he is, in the eye of the Divine Judge, after the alteration of mind, a man agreeable to God and by consequence another man. As such, that is, in the mind of the son of God, or, when we personify this idea, this person, as a *substitute*, even bears for him (for another, the old man) the guilt of the sinner, through suffering and death gives satisfaction, as a *redeemer*, to the Supreme Justice and, as an *advocate*, occasions that *you may hope to appear before your Judge as justified*, only that (in this mode of representation) that suffering, which the new man, in quitting the *old*, must continually undertake in life, is exhibited by the representative of humanity as a death once for all suffered. The imputation of this merit, however, never happens but out of *grace*, because we have no title that that, which always consists with us but in merely *becoming* (namely, to be a man acceptable to God,) shall be so imputed to us, as if we already were in the full possession of it.

We have here exposed the conception of justification, and exhibited its practical validity. But the question is, whether this exposition can have any practical use, and what this can be? As it falls out that he, who would appropriate this imputation to himself, must already find himself in the state of a morally good mindedness; no positive use

can be made of it for amendment. Moreover, as the consciousness of a good mindedness, so far as it has already proved itself to be genuine and constant by a long continuance, brings about of itself the tranquillity of a man acceptable to God, so it cannot be thought as a mean too of producing this tranquillity. A negative use of it, however, may be thought. For this insight into the conception of justification must convince every body that nothing in the world can supply the place of a good mindedness and the alteration of the manner of thinking, in order to make him, in the eye of God, a man agreeable to God.

Though the bad principle is in the world, care has been taken that it never should completely obtain the dominion over the human species. In order not entirely to lose the claim which the good principle has upon man, it was necessary there should be a nation, by whom the good principle is honoured, and so, as it were, its remembrance preserved. Finally, there appeared a man of this nation, who expounded, according to its internal contents, that which hitherto had been but outwardly known and honoured. By his own life he gave an example of the dominion of the good principle over men and of the inward reverence for it, which consists in its admission into the mind. The dominion of the bad principle was hereby exposed to danger; it therefore exerted all its energy to resist the good principle and that morally good man who had adopted it himself; it excited every persecution against him, occasioned every suffering,

suffering, which none but the well-minded sensibly feel, calumniated the purity of his intentions and doctrines, and pursued him to even the most ignominious death, without being able, by means of these assaults upon his steadfastness and openness of heart in doctrine and example for the welfare of the most profligate and unworthy, in the smallest degree to effectuate any thing against him.

The dominion of the bad principle, however, is not therewith banished from the earth, but still continues. But the possibility of quitting it is become evident by that example. This consists in nothing but in the practical belief in the son of God, that is to say, in the revolution of the maxims of the way of thinking. We see that, if in this manner we divest the mode of representation in the bible of the phenomenon of the son of God upon earth of its mystical vail, its sense remains valid for the whole world, and at all times, which sense consists in there being absolutely no salvation for man, but in the most intimate admission into his mind of genuine moral principles.

To conclude; an endeavour, like the present, to seek in the scriptures that sense, which harmonizes with the *most sacred*, what reason teaches, cannot be considered as only permitted, but must be rather held duty, and one has but to call to mind that which the wise teacher said to his disciples of somebody, who went his own way, whereby he at last must reach the very same aim, *Forbid him not: For he, that is not against us, is on our part.*

The present exposition of the contents of the Christian religion and its exhibition as a moral religion are very different indeed from that, by which it, its promulgation, and the phenomenon and events of the hero of its narrative, are pretended to be miracles; but if the latter exposition has the issue, that the moral aspect of this religion is thereby lost, which takes place, when the precepts of the moral law are not deduced from the principle of moral liberty, but from the will of God, that is delivered over to man in the bible, and hereby, notwithstanding all moral exactitude of actions, they are deprived of all morality; if the son of God is holden to be him, who atoned for the transgressions of mankind; and if it is opined that the *theoretical* belief in him can redeem men from guilt: Then is it duty earnestly to oppose this exposition; that it in itself and the conception of a miracle in general fall into the unintelligible, is, after the dissection or that which constitutes all intelligibility, easily perceived. The only practically valid representation of a miracle is the reference of the whole phenomenon of the moral religion of the gospel, so beneficent to man, to a *substratum* of nature. But this phenomenon itself remains, notwithstanding this reference, an event natural, and ranks under intelligible laws of nature.

3.

The Victory of the good Principle over the bad, and the Founding of a Kingdom of God upon Earth.

All that man can gain in this life over the bad principle, is, *deliverance from its dominion*. Of his constancy in the service of the good principle the continuance in the good mindedness of his former life may well assure him. But he never can become completely certain of it. His morality, however, is in the greatest danger from the relation in which he stands to others, and it is not necessary that they should be presupposed as sunk into the bad and as seducing examples; it is enough that they exist, that they surround him, and that they are men, in order to corrupt one another mutually in their moral predispositions and to make one another bad. No mean, now, to operate against this depravation resulting from the combination of men, can be conceived, but an union of them instituted for the opposite end. Such a conjunction of men under mere laws of virtue, for the purpose of obtaining the good principle to reign among them, is denominated an *ethical one*, and so far as these laws are public, an *ethical civil society*, or an *ethical commonwealth*.

A *political state* is that relation of men to one another, so far as they rank in common under *public laws of jus* (which are all coactive). An *ethical civil state* is that, where

men are united under laws free from coercion, that is, mere *laws of virtue*. To the former is the *juridical*, to the latter the *ethical, state of nature* opposed. In both every person is his own judge, and there exists no public authority possessing potency, which determines in a valid manner what, in occurring cases, every one's duty is, and carries that into universal execution.

In a political commonwealth the citizens may find themselves in the ethical state of nature and not have hit an union according to mere laws of virtue. So much follows from the conception of an ethical commonwealth, that the political one cannot force its citizens to enter into that state. And the former distinguishes itself from the latter in this, that the juridical civil state, according to the laws constituting it, may be very different, but the ethical, as the laws that constitute it are laws of virtue, can be but one, by consequence the conception of it, as an ideal, comprehends in itself the whole human race.

The juridical state of nature is a state of war of every one against every one, that is, the state, wherein, as every body is his own judge, the liberty of every one is constantly in danger of being infringed, and it is therefore duty to quit that state of nature as soon as possible. The ethical state of nature is that, wherein men mutually corrupt one another morally, and it is equally duty to quit this state and to enter into an ethical commonwealth. This duty is of that peculiar sort, that it is not towards other men, but a duty

duty which the human species owe to themselves. It is then duty to contribute to effectuate a whole, (to produce the chief good,) which, however, we cannot know, whether it, as such, be in our power. Consequently it cannot be accomplished but under the idea of a moral Author of nature, and the conception that the progress of nature will by degrees reach this aim.

In a juridical civil state the people themselves must be thought as legislators. The end of every civil constitution is directed towards the mere legality of actions. Their harmony with the liberty of every body according to an universal law. In an ethical commonwealth, which has the morality of actions only for its object, the people cannot be thought as lawgivers. Nor can the laws of an ethical commonwealth be considered as arbitrary laws of a sovereign. As, in regard of their observance, the mindedness only is concerned, the legislator must be thought as a knower of hearts. By consequence the conception of an ethical commonwealth is founded in the idea of God, whose commandments express the moral law, who therefore requires the good intent, and allows the participation of felicity to every one according to his worth. An ethical commonwealth, then, is possible to be thought as a *people of God* merely.

An ethical commonwealth under the Divine moral legislation is a *church* which, so far as it is no object of possible experience, is termed the invisible church (a mere idea of the union

of all the virtuous under the Divine immediate but moral government of the world, as it serves as an archetype for every one to be founded by man). The *visible* is the actual union of men in a whole, that harmonizes with that ideal. The true (visible) church is that which represents the (moral) kingdom of God upon earth. The requisites, of course the criteria, of the true church are:

1. Its *universality* and consequent numerical *unity*, to which it must contain in itself the predisposition, that, though divided into accidental opinions and disunited, it is, with respect to the essential design, erected upon such principles, as must necessarily lead it to universal union in one church, (therefore no division into sects).

2. Its *quality*, that is, the *purity*, the union under no other than moral springs. (Purified from the imbecility of superstition and the frenzy of fanaticism).

3. The *relation* under the principle of liberty, as well the internal relation of its members to one another, as the external of the church to political potency. both as in a free state (therefore neither *hierarchy*, nor *illumination*, a species of *democracy* through peculiar inspirations, which may be different according to every one's different fancy).

4. According to *modality*, the *immutability* of its constitution, but with the reserve, according to time and to circumstances, to alter the casual arrangements only of its *constitution*, for which it must contain in itself (in the idea of its end) the sure principles *à priori*.

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Therefore under original laws, like a *code*, published together for precept, not arbitrable symbols which, since authenticity is wanting to them, are contingent, exposed to contradiction, and variable.

An ethical commonwealth, as a church, that is, considered as a representative of the kingdom of God, has, according to its principles, no constitution similar to the political. The constitution in it is neither *monarchical* (under a pope or patriarch), *aristocratical* (under bishops and prelates), nor *démocratical* (as sectarian *illuminés*). It might best of all be compared to that of a family, under a common, though invisible, Father, so far as his holy son, who knows his will, and is at the same time in consanguinity with all the members, represented him in it, by making his will better known to these, who honour the Father in him, and thus enter with one another into a voluntary, universal, and lasting, union of hearts.

It is duty in men to quit the ethical state of nature, and to enter into an ethical commonwealth, yet, when men are contemplated as they are exhibited to us in experience, no other mode of founding a visible church, than that men have holden certain rules immediate statutes of the Divine will, can well be conceived. Such a belief, which we in order to distinguish it from the pure moral belief shall name *church-belief*, must precede in order to furnish a visible point of union for the institution of an ethical commonwealth. As long as this is a *church-belief* and not a moral belief,

lief, so long is its religion a *worship*, and not a moral religion: That, though very distinct from this, yet perhaps necessary in order to found it and a true church, could be obtained by nothing so well as by a *holy writ*, which compriseth those statutes considered as Divine.

So much, now, as moral religion is propagated among mankind, so much is the consideration of the church-belief diminished; when the rules of the latter, which are holden to be the oracles of the Divine will, are of such a nature, as not to be hurtful to moral religion, nay, when these pretended Divine commandments lead precisely to moral religion, and the end of a certain revelation is evidently that, to make all belief in it superfluous, then is this holy writ, which aims at the annihilation of the (theoretical) belief in its Divine nature, a certain criterion of its divinity, namely, the possibility of the reference of this holy writ, as a phenomenon, to a moral Author of nature.

In the proportion that moral religion is developed in the class of men, who are united with one another in a certain church-belief, in the same proportion does this pure belief of religion become the expounder of the church-belief and of the sacred writ upon which it is built. The historical faith is *dead being alone*, that is to say, considered by itself as a profession, it neither contains, nor leads to any thing, which has a moral value for us. The merit of the clergyman, who labours to find the sense of a passage of scripture and its author's meaning, may thereby,

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as a satisfaction of a desire for knowledge, always preserve his value; to those, whose moral belief has still further occasion for the veil, insomuch that they require that their pure belief of reason shall also be found in the scriptures, that learned exposition, by tending to establish in them the good mindedness, will have a moral value.

The church-belief is by its very nature a particular belief; it is founded in history, and is a belief in events, which must be in conjunction with the supersensible; accordingly this belief can be valid but for those, whom the history has reached, and who observe not the leap into the unintelligible, consequently its void. The pure belief of reason, on the contrary, which is founded in nothing but the consciousness of morally good sentiments, is an universal belief. So far now as a certain church-belief has in itself the principle, finally to resolve itself into the moral belief, the church that adheres to it may always be termed the true church; it will however be still a *polemical* church, because its faith, as a church-faith, is but a particular one, and yet never ceases to lay claim to universality, with the prospect to terminate, at last, in the immutable and all-uniting *triumphing* church.

The faith of every person, who possesses the moral receptibility (worthiness) of being eternally happy, is denominated the *saving* faith. It is therefore, notwithstanding all church-faith in a subject, the moral faith, that, far from every belief in traditions, is
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the state of mind of the virtuous, who, in the consciousness of his good way of thinking, refers nature to its moral Author. The saving faith contains two conditions of this hope of salvation: the one with regard to what the virtuous man himself cannot do, Justly (before a Divine Judge) to undo his actions already done, the other with regard to what he himself can and ought to do, To conduct himself in a new life conformably to his duty. The former belief is that in a satisfaction (acquitting his debts, redemption, reconciliation with God), the latter is the belief to be able, in a farther course of life, to become acceptable to God. Both points make up but *one* faith, and this conjunction cannot otherwise be thought, than that he who, instead of the springs of the inclinations, has made the moral law the chief maxim of his will, and who, in the consciousness of his good mindedness, holds himself assured to be a man agreeable to God. This assurance comprises that of reconciliation, (of laying aside the old man; which is a penitence for the trespass in the person of the new).

If this moral side of the saving belief is neglected, and if it is holden but a doctrinal belief: it then involves the following antimony: In order to be able to take the resolution to leave off the bad and, from all presumptions grounded upon preceding experience that he will allways fall back again into it, not to be discouraged, it is necessary for man to hold himself assured of the blotting out of his guilt already incurred. But of whatever nature such an atonement may be,

be, he can appropriate it to himself on no other condition, than so far as he has already adopted good sentiments, consequently so far only as he is a good man. Here are not two principles distinct in themselves, where opposite ways are to be taken to begin either the one or the other, but only one practical idea, from which we set out, *first*, so far as it represents the archetype as to be found in God, and proceeding from him, *secondly*, so far as it represents it as to be found in us, and *both*, so far as it represents it as the rule of our life; the antinomy, therefore, is but seeming; since it considers the very same practical idea, but, through a misunderstanding, taken in a distinct reference, as two distinct principles.

Of the good principle can but first be said that its dominion is founded upon earth, when any where upon it the principle for an ethical commonwealth obtains. That the gospel, though its veil is a church-faith, embraces moral religion, and that the whole predisposition of this church-faith aims at resolving itself into the moral and pure belief of reason, are beyond a doubt. But when we examine history concerning the origin of this foundation of the kingdom of God upon earth, we find that, though Judaism was the occasion of the religion of reason to be found in the evangel, this religion was not at all contained in it, Judaism was by no means a religious constitution; in it God is represented but as governour of the world, who pretends to the outward obedience only of his orders, but directs not his attention to the moral sentiments

ments of his subjects. It is obvious; *first*, because all the commands of Judaism are of such a nature, that a political constitution can consist of them and injoin them as coactive laws, because they concern outward actions only; *secondly*, that all consequences of the keeping and transgressing of these commandments, every reward and punishment, were confined but to such, as could be distributed to every body in this world; and even these not according to ethical conceptions, as both affected the descendants, who bore no practical part in either those deeds or misdeeds; which, in a political constitution, may, it is true, be a prudential mean to procure obedience, but, in an ethical, would be repugnant to all equity. *Thirdly*, Judaism succeeded so ill in constituting an epoch pertaining to the state of the *universal church*, or even, in its time, this universal church itself, that it rather excluded the whole human race from its community, as a separate people, chosen by God, and who bore enmity to all other nations, and therefore were holden in aversion by every body. It is not to be overrated that this people admitted but one God, as the universal sovereign of the world, not to be represented by any visible or graven image: For it is to be found among most other nations that their doctrine of belief had that in view likewise, and became suspected of polytheisms but through the *worshipping* of certain inferiour deities subordinate to that mighty One. For a god, who willet the keeping of such commandments only, to
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which no amended moral mindedness is at all required, is not that moral Being, whose conception we stand in need of for a religion: This would rather take place from a belief in many such invisible beings, if a nation conceived these in such a manner, that they, notwithstanding the difference of their departments, were all unanimous in thinking him, who attaches himself with all his heart to virtue, worthy of their complacency, than if the belief were devoted to a single being only, but who makes of the main work a mechanical business.

If by an ethical commonwealth is to be understood that church-union only, which contains in itself the principle of working out the moral belief, its beginning and the first origin of that church which, in our days, because of this principle proceeding on religion of reason, is named the true church, must not be placed earlier than the phenomenon of Christianity. Its first teachers explained this phenomenon and the events that it brought about as the fulfilling of the prophecies contained in Judaism, whereby their design evidently was to introduce a pure moral religion, instead of an ancient worship, to which the people were but too much accustomed, yet without directly shocking their prejudices. The subsequent abolition of the bodily signs, which entirely served to separate that nation from others, leaves room to judge that the new belief, not bound to the statutes of the ancients, nay, not to any statutes, must have contained a religion valid for the whole world and not for a single nation.

The founders of Christianity used the church-faith, which prevailed in their times, for the purpose of introducing the true moral religion; this use was in itself an augmentation of the church-faith: Besides they appealed to certain events, named miracles, which drew the attention of the Jews, in order that men might thereby be the more easily made attentive to the moral contents that lay hidden under this veil. But whatever the state of these miracles, or the origin of their narrative, may be, the plan of providence proceeding on moral religion cannot, though the Jewish nation was governed by a learned nation that took no notice at all, during several centuries, either of the phenomenon of Christianity, or of the miracles which grounded it, be mistaken in them. But it must become much easier for every subsequent time to lay aside this veil of true religion belonging to the church-faith, which in the infancy of humanity was necessary, in order not to lose this jewel, and to lead mankind to the pure belief of reason itself.

In the whole church-history hitherto known, the present time, of which may be said that the church-belief inclines more in it, than in any preceding, towards the pure belief of reason, is unquestionably the best. For, *first*, among all true reverers of religion in every country of our quarter of the globe it is become a principle, neither to attack the book itself which, though it has moral religion in view, according to its historical part, contains a mere church-faith, nor to enfeeble its value
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by petulant assaults, but to use it further as a foundation of church-education, yet so as not to obtrude upon any person the belief in it as necessary to salvation. *Secondly*, the principle prevails always more and more to distinguish the church-faith of the scriptures that may be constantly controverted from the pure moral faith, which is exalted above all controversy, and to refer to this the beatific power formerly ascribed to that.

Thirdly and lastly, the kingdom of heaven is represented by the gospel not only in its approach, but in its entrance, and so must be considered, as a symbolical representation tending to the greater animation of hope and courage and of the aspiration to it, the prophecy of the completion of the great alteration of the world, in the picture of a visible kingdom of God upon earth (under the government of his substitute and vicegerent descending again,) and of felicity which, after the separation and expulsion of the rebels, who once more attempt their resistance, will be enjoyed here upon earth under him.

4.

*Of Worship and of spurious Worship under the Dominion of the good Principle, or of Religion and Priestdom.**

The union of men in the pure religion of reason, without all statute-laws, is the invi-

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* *Priestdom* (*hierodulia*) (if the translator may be allowed to coin this word, as *priestcraft*, which comes the nearest

sible church. Its conception is a mere idea, to which every *visible church*, under statute-laws, ought to aspire. Accordingly this idea excludes all church-service or office. None but the visible church, which is built upon a church-faith, comprises a church-service, and but in it are there ecclesiastics or ministers of the gospel. What lies, however, in this conception of an ecclesiastic, is, that the church-faith and the ecclesiastics, as its administrators, shall strive to render useless all church-faith and to resolve it into the pure belief of reason. But when churchmen do not observe this and, on the contrary, even interpret the aspiring to this aim as condemnable, then is the church-service, of which they are apprehensive, a mere spurious service, whereby they themselves effectuate the end of a church as an ethical commonwealth.

From the origin may be totally abstracted, when the fitness or unfitness of a religion to be an universal one for mankind is judged of. In this respect, however, all religion is either the *natural*, or a *learned*, religion: of the former every one may be convinced by his own reason: But the latter requires learning, by which he, who would be convinced of it, must be led: Therefore, natural religion only is capable of universal communication.

Every *revealed* religion is also a learned religion.

nearest of any vocable in English to *Pfaffenhum* in German, is not comprehensive enough in this sense.) is, in general, the usurped dominion of the clergy over the minds, by their (the clergy's) giving themselves the air of being in the exclusive possession of the means of grace.

religion. For, as we live remote from the time of its origin, learning is required in order to transpose ourselves to that time. But a revealed religion may at the same time be the natural religion. It is so, when its doctrines are of such a nature, that reason of itself could likewise have hit on it; and a conviction of its truth is to be obtained from reason only, and not from revelation by means of learning. Such a revelation would have this merit with the human species, that it would found an ethical commonwealth earlier, than it would have been done without its appearance. Suppose, now, that a certain religion of this sort should exist under the title of a revealed one, the conception of its supernatural origin would always remain unintelligible to us. It would, however, if nothing of its essence were lost, have the character of truth and the fitness for an universal religion of man; let us suppose too that the history of its origin should be either lost or called in question, which would happen, if, according to its internal quality, the belief in its supernatural origin should be considered as something quite contingent. We shall be able to illustrate this conception of revealed religion, so far as it is at the same time the natural, by an example. We shall represent the Christian religion, *first*, as a natural, and secondly, as a revealed, one; and in this confine ourselves to the New Testament, as the fountain of the Christian doctrine of faith.

If we find that the founder of the Christian religion taught the pure religion of reason,

conceivable by every body, in spite of a burdensome church-faith, which aimed not at all at moral religion, and at the same time was universal, and that he added certain statutes which, though they contain forms and observances, serve as means to bring about a church grounded upon those principles; we cannot, notwithstanding the contingency and arbitrariness of his ordinances aiming at this, refuse it the name of the true universal church, nor him the authority to summon mankind to unite in it, yet without being willing to augment the belief by new oppressive ordinances, or even to make those, first hit by him, peculiarly sacred of themselves and obligatory points of religion.

He willeth, that not the observance of outward, civil or statutory church-duties, but only the pure moral sentiment of the heart, can make men acceptable to God (Mat. v. 20-48); that sins in thought are considered, before God, equal to the deed (28), and in general holiness is the aim to which they must aspire (48), that to hate in the heart is as much as to kill (22), that an injury done the neighbour be amended by satisfaction to himself, but not by religious acts (24), and that, in point of veracity, the oath, the civil mean of extortion, is derogatory from the reverence for truth itself (34-37); — that the natural but bad propensity of the human heart must be entirely converted; the sweet sense of revenge must make a transition to tolerance (39, 40) and the hatred of one's enemies to beneficence (44): Thus, sayeth he, is
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his intention to fulfil entirely the Jewish law (17), whereby, however, evidently not scripture-learning, but pure religion of reason must be its interpreter; for, taken according to the letter, it permits directly the contrary of all these: Moreover, he doth not forget the misconstruction of the law under the denominations of strait gate and narrow way, which men allow themselves, in order to pass by their true moral duty, and to indemnify themselves for it by the performing of church-duty (VII. 13): of these pure sentiments he requir-eth that they shall prove themselves by *works* (16), and depriveth those of their delusive hope, who are of opinion to supply their want by the invocation and extolling of the Supreme Lawgiver in the person of his minister, and to obtain favour by means of flattery (21): He willeth that these works be performed for the sake of example, for imitation, publicly and with a cheerful mind, not as actions exacted in a servile manner (VI. 16), and that thus, from a small beginning of communication and propagation of such sentiments, like a grain of mustard-seed in a good field or a leaven of the good, religion through internal power would increase by degrees to a kingdom of God (XIII. 31, 32, 33): In fine, he compriseth, 1. in an *universal* rule (which contains in itself as well the internal, as the external, moral relation of man), namely, discharge thy duty from no other spring, than from the immediate estimation of its value, that is, love God (the legislator of all duties) above all, 2. in a *particular* rule (which con-

cerns the external relation to other men as an universal duty), namely, love every one as thyself, that is, promote their wellbeing out of immediate benevolence, not out of benevolence derived from selfish springs; which commandments are not only laws of virtue, but precepts of *sanctity*, to which we ought to aspire, and the mere aspiring to which is named virtue: But those who, with arms a-cross, passively expect this moral good, as a celestial gift from above, doth he refuse all hope. Whoever leaves unemployed the natural predisposition to the good, which (as a talent committed to his charge) lies in human nature, in indolent confidence that a superior moral influence will otherwise supply the moral quality and perfection that are wanting to him, him doth he threaten that even the good, which he from his natural predisposition might have done, shall, on account of this neglect, stand him in no stead (xxv. 29): As to the natural expectation of a lot conformable to the moral conduct of man with regard to felicity, chiefly by so many sacrifices of the latter, which must have been made on account of the former, for that he promiseth the reward of a future life (v. 11, 12); but, according to the difference of the mindedness in this conduct, those, who discharge their duty *for the sake of reward* (or of releasing from a merited punishment), in another manner, than the better men, who performed it for its own sake only: He, whom self-interest, the god of this world, governs, is, when he, without giving it up, only refines it

it through reason and extends it beyond the narrow sphere of the present, represented as one (Luke xvi. 3-9), who cheats that master of his through himself, and gains sacrifices from him in behalf of duty: For, when he conceives the thought that he must one time or other, perhaps soon, leave the world, that the cannot take with him to the other what he possessed in this, he resolves to deduct from his account what he, or his master, self-interest, had to demand here lawfully from indigent men and, so to speak, to procure for himself in return bills, payable in another world; in which, as to the springs of such beneficent actions, he indeed proceeds more *prudentially* than *morally*, but conformably to the moral law nevertheless, at least according to the letter, and may hope that he will be recompenced for this hereafter: When with this is compared that which is said of the beneficence to the poor from bare motives of duty (Mat. xxv. 35-40), where the Sovereign Judge of the world declares those, who give assistance to persons suffering want, without ever imagining that such a thing deserves a reward, and that they thereby, as it were, oblige heaven to a remuneration, just because they did it without the consideration of a reward, to be the proper elect for his kingdom; It is obvious that the teacher of the Gospel, when he spoke of the rewards in the world to come, did not intend to constitute them springs of actions, but only (as soul-exalting representations of the completion of the Divine goodness and wisdom in conduct-

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ing the human species) objects of the purest reverence and of the greatest moral complacency for a reason judging the destination of mankind on the whole.

Here is now a complete religion, which may be conceivably and convincingly represented to all men by their own reason, and which, by an example, whose possibility and even necessity to be an archetype of imitation for us (as much as men are capable of it), is made intuitive, without either the truth of that doctrine or the authority and dignity of the teacher standing in need of any other attestation whatever (to which learning or miracles, that are not every one's affairs, would be required). When appeals to older (Mosaic) legislation and typical representation occur in it, these are not made with a view to confirm the truth of the doctrine itself, but only to serve for an introduction among those, who adhere entirely and blindly to what is ancient; which, among men, whose heads, filled with statute-articles of creed, are almost become unsusceptible of the religion of reason, must always be much more difficult, than if they were brought to the reason of uninstructed but uncorrupted men. Wherefore it ought not to surprise any one, if he should find a propounding, conformable to the prejudices of old, enigmatical for the present times and requiring a careful exposition; though it every where betrays a doctrine of religion, and at the same time often expressly points out the way to it, which must, without any expence of learning,
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be intelligible and convincing to every body.

Where the Christian religion contains tenets, which, distinct from the former, lie not in reason itself and cannot be unfolded out of it, it is a learned religion. For, were it granted that, through miracles and actions, these tenets, in the eyes of the contemporaries of the founders of Christianity and of the ignorant, immediately obtained valid authenticity, in our days, their sense, as well as their actual descent from the founder of the religion, cannot otherwise be so well shown, as by means of learning. When these doctrines of religion, on whose account the Christian religion is a *learned* one and denominated *Christian faith*, are given out for necessary articles of belief, this must not be so understood, as if the tenets of belief were the chief principle, upon which the moral religion, that is contained in the Christian religion, must be built. Conversely, the universal religion of reason must be the chief principle, from which, in the Christian religion, the beginning is to be made, and the necessity of the adoption of the articles of faith peculiar to it must lie in moral religion only, which articles must be suitable to lead mankind to this religion and to render it conceivable to the illiterate.

But if the matter is reversed and the statute-belief allowed to precede, the church-service is converted into a spurious service. Such a church has not servants (*ministri*), but high officers (*officiales*), who, after they have
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by degrees stripped the pure religion of reason of the dignity due to it to be the chief interpreter of the holy writ, and have ordered scripture-learning only to be used for the behoof of the church-faith, wish to be held the only persons, whose vocation it is to expound that writ.

When the statutes, which are to be admitted as Divine but for the behoof of a church, and which, according to their nature, are perhaps to be confined to one nation only, are ascribed to the essence of religion, and when the observance of these, relatively to religion, quite casual ordinances are represented as necessary to obtain the favour of the Supreme Being; in these consists the *fancy of religion*.

The fancy of religion, like every fancy, consists in the permutation of what is but a mean, with its end, and also in our attributing to that, which is but a mean, the value of the end. All fancy of religion rests upon the following principle: by all that we do but merely with a view of pleasing the Deity (when it is not just directly contrary to morality, though it contributes not the smallest to it,) we prove our obsequiousness to God, as obedient and by consequence agreeable subjects, and therefore serve God (*in potentia*.)

The principle of moral religion, in contradistinction to the fancy of religion, is, That man can be agreeable to the Supreme Being through nothing but a morally good mindedness. No person is able to give proof of a perfectly

perfectly pure and holy mind, yet no revelation can assure more, than that God, in some manner or other, totally unknown to man, will supply this want of proper righteousness, *provided* man render himself worthy of this supernatural grace. Even the acceptance of such tendered means of grace must therefore consist in the good mindedness. But when this maxim is departed from, superstition has no bounds, since there are an infinite number of arbitrable actions, which men may resolve upon, in order to do the will of the Deity.

Whoever opines, through actions which in themselves contain no moral value at all, immediately to obtain the complacency of God, and by means of which to be able to produce natural events suitable to his wishes, has the fancy, by natural means to produce a supernatural effect. Essays of this sort are commonly named *sorcery*, but which (as it conveys the accessory conception of an intercourse with the bad principle, whereas that essay may be thought as undertaken out of misunderstanding with a good moral design,) we shall exchange for the known expression, *the making of fetiches*. Of every species of superstition that of the belief, which is made a duty, is, for conscientious men, the most troublesome, which belief, since it rests upon historical grounds, or is in itself even unintelligible, cannot be altogether universally convincing, and is therefore a more heavy load, than all other enjoined observances, to which it is sufficient that one but attends, in order to be congruous to a regulated ecclesiastical

siastical institution, without lying under the necessity of either inwardly or outwardly making profession of faith that one holds them ordinances *founded by God*. For by this is the conscience grievously burdened.

Priestdom consists in the constitution of a church, wherein prevails a fetiche-worship, which is always to be met with, when statute-commands, rules of faith, rites or external observances, but not principles of morality, constitute its foundation and essence. Though the ordinances, to which obedient submission is made a duty, be ever so few, that belief, whereby the multitude are governed and robbed of their moral liberty, is a fetiche-belief.

The fancy by religions actions of worship to effectuate something with regard to the justification before God is the religious *superstition*; as the fancy to wish to effectuate this by an endeavour towards an opiniative intercourse with God, is the religious *fanaticism*. *Bigotry* (*devotio spuria*) is the custom, instead of actions agreeable to God (discharging all the duties of men), to place the exercise of piety in the immediate occupation about God by doing homage or by demonstrations of awe; which exercise must then be considered *villanage* (*opus operatum*), only that it adds to superstition the fanatical fancy of imaginary supersensible (celestial) feelings.

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*Of the Guide of Conscience in Matters of
Belief.*

It is not the question here, How conscience shall be guided, (for it requires no guide; it is sufficient to have a conscience), but how it itself may serve for a guide in the most doubtful moral resolutions. —

Conscience is a consciousness, that is duty of itself. But how is it possible to conceive such an one; as the consciousness of all our representations seems, if we would render our representations clear, to be necessary but with a logical view, therefore in a conditional manner only, by consequence cannot be unconditional duty?

It is a moral principle, requiring no proof, *That one should not run the risk of any thing that may be wrong (quod dubitas, ne feceris! Plin.).* That the consciousness then, that an action, which I have a mind to undertake, is right, is unconditional duty. Whether an action in general be right or wrong, of that the understanding judges, not conscience. It is not absolutely necessary to know of all possible actions, whether they are right or not. But of that action, which I have a mind to undertake, I must not only judge, and opine, but I must be *certain*, that it is not wrong, and this demand is a postulate of conscience, to which is opposed the *probabilism*, that is, the principle, That the mere opinion that an action may be right, is sufficient to undertake it. — Conscience might be thus defined, *It is the moral judgment judg-*
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ing itself; but this definition would much require a preceding explanation of the conceptions contained in it. Conscience judges not the actions as cases that rank under the law; for reason, so far as it is subjectively practical, does that, (hence the *casus conscientiae* and casuistry, as a species of dialectic of conscience): but here reason itself judges whether it has actually undertaken that judgment of the actions with all circumspection (whether they be right or wrong), and produces man as a witness, either *for or against himself*, that this has, or has not, happened.

Let us for instance take an inquisitor, who firmly adheres to his statute-belief as the only one, even to martyrdom, and who has to judge an heretic, so named, (otherwise a good citizen) accused of unbelief, and now I ask, whether, when he has condemned him to death, it can be said that he judged him conformably to his conscience (though erring), or whether he may rather be absolutely charged with *want of conscience*, let him have erred or done wrong with consciousness? as one may positively say to him that in such a case he never can be fully certain that he does not completely wrong. He was probably of the firm belief that a supernatural revealed Divine will (perhaps according to the *dictum: compellite intrare*) allowed him, if not even made it duty, to exterminate the opiniative unbelief together with the infidel. But was he then actually so much convinced of such a revealed doctrine, and also of this sense of it, as is required, in order to risk putting a man
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to death? that it is wrong to take the life of a man on account of his belief of religion, is certain: unless (in order to grant the most,) a Divine extraordinary will, become known to him, has otherwise directed it. But that God ever uttered this frightful will rests upon historical documents and is never apodictically certain. The revelation reached him but through men, was expounded by them, and seemed to him to come from God himself, (like the order delivered to Abraham to butcher his son like a sheep,) yet it is at least possible that an error obtains here. But then he would run the risk to do some thing that were highly wrong, and just in this he acts unconscientiously. — All belief of history and phenomenon are so circumstanced, that the possibility always remains that an error is to be therein met with, consequently it is unconscientious to give way to it with the possibility that that, which it either requires, or allows, is wrong, that is, at the risk of the violation of a duty of man certain in itself.

Besides, let an action, which such a positive law (held) of revelation commands, be in itself allowed, the question is, what clerical chiefs or teachers would, according to their opinative conviction (and at the risk of losing their places), impose it to be professed by the people *as an article of creed*? As the conviction has no other than historical arguments for it, but in the judgment of this people (if they try themselves but in the least), the absolute possibility of an error happening perhaps in them, or in their classical interpreta-

tion always remains, so the clergyman would necessitate the people to believe something, at least inwardly, as true, as they believe a God, that is, to profess, as it were, before God, that which they do not know certainly as true, for example, to acknowledge the appointment of a certain day for the periodical public furtherance of piety, as a part of religion immediately ordered by God, or to profess a mystery, which they do not even understand, as firmly believed from him. Their ecclesiastical chief would in this proceed against his conscience, to obtrude upon others for belief something, of which he himself never can be fully convinced, and therefore ought to reflect well on what he does, as he must answer for all the abuse from such a base belief [*Frohn glauben*]. — Perhaps there may then be truth in what is believed, but yet at the same time want of veracity in believing, (or even in its merely internal profession), and this is in itself condemnable.

It was above observed that men, who have made but the least possible beginning in liberty,* as they were formerly under a slavish yoke

* I own I don't rightly understand the expression, which even prudent men use, namely, The nation is not ripe for liberty: The bondservants of a proprietor of land are not yet ripe for liberty: Men in general are not yet ripe for the liberty of belief. But, according to such a pre-supposition, liberty will never take place; for a person cannot *ripen* for it, unless he be previously set at liberty (one must be free, in order to use his powers in liberty conformably to end). The first essays are indeed rude, and combined with a more troublesome and a more dangerous state, as men are yet at the orders and under the care of others; but men never ripen for reason otherwise, than

yoke of belief, (*exempli gratia*, the protestants) directly hold themselves, so to say, ennobled, the less they have need to believe (what is positive and belonging to the precept of priests), yet it is with those, who have neither been able nor willing to make an essay of this sort, quite the reverse; for their principle is, It is adviseable, rather to believe too much, than too little. For what one does more than is incumbent on him, does at least no harm, but may perhaps be of great use. — In this fancy, which lays down dishonesty in professions of religion as a principle, (which one resolves upon the easier, as religion makes amends for every fault, consequently that of dishonesty too), is founded the maxim of safety, so named, in matters of belief (*argumentum a tuto*): If what I profess with regard to God is true, I have hit it, if it is not true, but at the same time nothing in itself unallowed, I have believed it superfluously merely, which, it is true, was not necessary, but which has occasioned me trouble only, that is however no crime. The danger from the dishonesty

Dd 2

than by their own essays (to be able to make which they must be free). I have no objections that those, who have the power in their hands, necessitated by the circumstances of the times, shall long, very long, delay the disengaging from these three fetters. But, to lay it down as a principle, that liberty in general is not fit for those, who are once under their subjection, and that they have a right to deprive them of it for ever, is an encroachment upon the sovereignty of the Deity himself, who created men to be free. It is indeed more convenient, when such a principle can be maintained, to rule in the state, in the house, in the church. But, Is it juster? — When will the poor slaves in the West-Indian colonies be ripe for liberty?

honestly of his pretext, *the violation of conscience*, to give out as certain even before God something, of which he is conscious that it is not of the quality to be affirmed with unconditional confidence, all these *the hypocrite disregards*. — The only genuine maxim of safety united with religion is directly the converse, What, as a mean, or as a condition of salvation, cannot be known to me by my own reason, but by revelation, and by means of a belief of history only adopted into my professions, but which is not repugnant to the pure moral principles, I cannot indeed believe and assure as certain, but just as little repudiate as certainly false. Without determining any thing, however, with respect to this, I reckon that what may be therein salutary will, so far as I do not render myself unworthy of it by the want of moral mindedness in a good life, be for my advantage. In this maxim there is true moral safety, before conscience, (and more cannot be required of a man,) whereas the greatest danger and unsafeness are in the opiniative prudential mean, craftily to avoid the disadvantageous consequence, which may arise to me from not professing and, by being well with both parties, to be well with neither of them. —

If the author of a symbol, if the teacher of a church-doctrine, nay, if every man, so far as he inwardly owns to himself the conviction of tenets as Divine revelations, asked himself, Wouldest thou venture in presence of the Knower of hearts, at the risk of the giving up of every thing that is valuable and
sacred

sacred to thee, to assure the truth of these tenets? One must have a very disadvantageous notion of human nature (at least not totally incapable of the good), not to presuppose that even the boldest teacher of belief must tremble at this.* But if that is so, how does it accord with conscientiousness to urge such an explanation of belief, as allows no limitation, to have the audaciousness to give out such assurances even as duty and belonging to Divine service, and thereby to destroy entirely the liberty of men, which is absolutely required to all that is moral (such as is the adoption of a religion), and not even to leave room for the good will, that says, *Lord, I believe; help thou mine unbelief!***

Dd 3

* The same man, who is daring enough to say That whoever does not believe in this or in that doctrine of history as a sacred truth is *damned*, must be able to say, *I'll be damned* if what I here relate to you is not true! — Were there any body capable of pronouncing such a horrible judgment, I would advise measures to be taken with regard to him according to this Persian saying of a *Hadgi*: If any one has been once in Mecca (as a pilgrim), quit the house which he inhabits with you; has he been twice there? quit the street in which he lives; but if he has been thrice in Mecca, oh! then quit the town, or even the country, in which he resides.

** O *sincerity*! thou *Asiræa*, why art thou flown from the earth to heaven, how much need have we to draw thee (the basis of conscience and therefore of all internal religion) down again to us? I may grant, though it is much to be regretted, that candour or openheartedness [to say the *whole* truth that one knows] is not to be met with in human nature. But *sincerity* [that *all that one says* be said with veracity] must be required of every man, and, if there were for it in our nature no predisposition, whose culture only is neglected, the human race would be in their own eyes an object of the most profound contempt. — But that desired property of the mind is such an one, as is exposed to many temptations, and occasions many sacrifices, and hence requires moral strength,

strength, that is, virtue (that must be acquired), but which must be sooner watched and cultivated than every other, because the opposite propension, if it be allowed to take root, is the most difficult to be eradicated. — Let one compare therewith our mode of education, chiefly in point of religion, or rather, the doctrines of belief when the faithfulness of the memory, in answering the questions relating to them, without considering the faithfulness of the profession (of which a trial is never made), is received as sufficient to make a believer, who does not understand what he solemnly affirms, and one needs no longer wonder at the want of sincerity, which makes nothing but profound hypocrites.

Wolves shall succeed for teachers, grievous wolves!
 Who all the sacred mysteries of Heav'n,
 To their own vile advantages shall turn,
 Of lucre and ambition; and the truth
 With superstitions and traditions taint,
 Left only in those written records pure,
 Though not but by the Spirit understood.

Paradise Lost.

THE
END OF ALL THINGS.

Dd 4

END OF ALL THINGS

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END OF ALL THINGS.

It is usual, especially in pious language, to let a dying man say that *he is going out of time into eternity*.

This expression would in fact say nothing, if by *eternity* should here be understood a time going on to infinite; for in that case man could never go out of time, but would always go but out of the one into the other. By that, therefore, must be meant an *end of all time*, in the uninterrupted duration of man, but this duration (his existence contemplated as a *quantum*) as a *quantum* totally incomparable with time (*duratio noumenon*), of which we can form to ourselves no conception (but a negative one). — This thought has in itself something dreadful, as it, so to speak, leads to the brink of an abyss, from which for those that sink into it no return is possible (*Ihn aber hält am ernsten Orte, Der nichts zurücke läßt, Die Ewigkeit mit starken Armen fest. Haller*); and yet something attractive at the same time: for one cannot avoid turning back to it his affrighted eye (*nequeunt expleri corda tuendo. Virgil*). It is terribly sublime, partly on account of its darkness, in which the imagination is accustomed to act more powerfully, than in a clear light. Finally, it must however be interwoven in a wonderful manner

with the universal human reason: as it is at all times to be met with, dressed in one way or another, among all reasoning nations. — When we follow the transition from time to eternity (this idea, theoretically contemplated, as an enlarging of cognition, may or may not have objective reality), as reason makes it to itself with a moral view; we fall upon the *end of all things*, as temporal beings and as objects of possible experience; but which end in the moral order of ends is at the same time the beginning of a duration of these very beings, as *supersensible*, consequently not ranking under conditions of time, which duration then and whose state are capable of no other than a moral determination of their quality.

Days are, so to say, children of time, because the following day, together with what it contains, is the production of the foregoing. As the last child is named the youngest of its parents; so our (German) language is pleased to name the last day (the period that ends all time) the *youngest day*. The youngest day, therefore, still belongs to time; for something or other (not pertaining to eternity, where nothing more takes place, because that would be continuing time) yet *happens* to it, namely, men giving an account of their conduct during their whole lifetime. It is a *day of judgment*; the judgment of pardon or of condemnation, then, is the proper end of all things in time, and at the same time the beginning of (either the blessed or the accursed) eternity, in which the lot of every one remains as it fell to him at the moment of the sentence.

Thus the last day comprehends in itself the last judgment. — If with the last things should be numbered the end of the world as it appears in its present form, namely, the falling of the stars from heaven as an arch, the tumbling of this heaven itself (or its *departing as a scroll when it is rolled together*), the burning of both, the creation of a new heaven and of a new earth for the seat of the blessed, and of hell for that of the damned: that day of judgment would not indeed be the last day; but many others would follow it. As the idea of an end of all things, however, does not take its rise from the reasoning on the *physical*, but on the moral course of things in the world, and is occasioned by it only; the latter solely can be referred to the supersensible, (which is intelligible but by the moral), such as is the idea of eternity: so the representation of those last things, that are to come after the last day, must be considered as a mode of rendering the latter sensible together with its moral consequences, otherwise not theoretically comprehensible to us.

But it is to be observed that since the most ancient times there has been two systems touching the future eternity: the one that of the *unitarians*, who decree to all men (purified by longer or shorter expiations) eternal salvation; the other that of the *dualists*,* who decree

* Such a system was in the ancient Persian religion (of Zoroaster) grounded upon the presupposition of two first beings engaged in a perpetual conflict with one another, the good principle, *Ormuzd*, and the bad, *Ahriman*. — It is strange that the language of two countries far distant from

decree salvation to a *few* elect, but to all *others* eternal damnation. For a system, according to which all are destined to be *dannèd*, could not well find place, else there would be no justifying ground; why they were in general created; but the *annihilating* of all would denote a balked wisdom which, dissatisfied with its own work, knows no other to supply its defects, than to destroy it. — The same difficulty, however, which prevented the eternal damnation of all from being thought of, stands constantly in the way of the dualist: for to what end, might it be inquired, were the few created, why even but a single person, if he should exist but to be cast out for ever? which is worse than not to exist at all.

Indeed, so far as we perspect it, so far as we can penetrate into ourselves, the dualistic system has (but only under *one* supremely good Being), with a *practical* view, for every man as he has to judge himself (though not as he is entitled to judge others), a preponderating ground in itself; for, so far as he knows himself, reason leaves him no other prospect in eternity,

from one another, but still farther from the present seat of the German language, is, in the denomination of both these first beings, German. I remember to have read in Sonnerat that in Ava (the country of the Burachmans) the good principle is named *Godemah* (which word seems to lie in the name *Darius Codomannus* too); and, as the word *Arilman* sounds very like the *arge Mann*, and the present Persian contains a number of words originally German; so it may be a problem for the antiquaries to trace by the clew of the *affinity of language* the origin of the present conceptions of religion of many nations. (See Sonnerat's Travels, B. 2, chap. 2. B).

eternity, than what his own conscience opens to him at the end of life from his course of life hitherto led. But for a *dogma*, consequently in order to make of it a theoretical tenet valid in itself [objectively], it, as a mere judgment of reason, is by far not sufficient. For who knows himself, who knows others so through and through, as to be able to decide whether, if he separated from the causes of his opiniatively well-spent life all that is termed merit of fortune, as his inborn temperament of a good quality, the natural greater strength of his higher powers (of understanding and of reason in order to tame his instincts), and besides the opportunity where chance fortunately saved him from many temptations, into which another fell; if he separated all these from his real character (as, in order to estimate this sufficiently, he must of necessity deduct them, because he cannot ascribe them, as gifts of fortune, to his own merit); who will then decide, I say, whether before the all-seeing eye of a Judge of the world one man, as to his internal moral value, has any preference whatever before another, and whether it may not perhaps be an absurd self-conceit, with this superficial self-cognition, to pronounce to his own advantage any one judgment on the moral value (and the merited fate) either of himself or of others. — The system of the Unitarians, therefore, as well as of the Dualists, both contemplated as dogmas, seems to lie totally beyond the grasp of the speculative faculty of human reason, and to lead us to reduce every thing to the
absolute

absolute limitation of those ideas to the conditions of the practical use only. For we see nothing before us that can inform us of our fate in a future world, but the judgment of our own conscience, that is, what our present moral state, so far as we know ourselves, allows us reasonably to judge thereof, namely, that such principles of our course of life as we have found predominant in us till its end (whether they be those of the good or of the bad), will after death continue to be so likewise; without our having the smallest reason to assume an alteration of them in that futurity. We must therefore have to expect for eternity the consequences suitable to that merit or to this guilt, under the dominion either of the good or of the bad principle; in which respect it is then wise so to act, as if another life, and the moral state in which we terminate the present, together with its consequences, were at our entry into that unalterable. With a practical view therefore the increasing system must be the dualistic; without however willing to make out which of the two, in a theoretical and merely speculative view, merits the preference; especially as the unitarian seems to lull too much in indolent security.

But why do men expect *an end of the world in general*? and, if this were even granted them, why just an end with terroure (for the greater part of the human species)?... The ground of the *former* seems to be that reason says to them that the continuance of the world has but so far a value, as the rational beings

beings in it are conformable to the scope of their existence, but if this shall not be attained, the creation seems to them to be to no end: like a play that has no issue, and gives to cognise no rational design. The latter is founded in the opinion of the corrupt quality of the human species,* which is carried even to a total want of hope; to put an end to which species and indeed a frightful end, is the only fit measure (for the greater part of men) of the highest wisdom and justice. — Hence the foretokens

* Thinking sages (or philosophers), without deigning to bestow the smallest attention to the predisposition to the good in human nature, have exhausted themselves in disagreeable, and in part disgusting, comparisons, in order to represent our terrestrial world, the abode of men, very despicably.

1. As an *inn* (or a caravansary), as the Dervis considers it, where every one putting up on his journey through life must expect to be soon dispossessed by a following one.
2. As a *house of correction*; which opinion the Brahmans, Thibetians, and other sages of the east (and even Plato) favour: a place of chastisement and purification for fallen spirits, cast out of heaven, at present human or animal souls.
3. As a *madhouse*: where not only every one apart destroys his own designs, but the one occasions the other every imaginable vexation, and over and above holds the address and power to be able to do that the greatest honour.
4. And lastly as a *common sewer*, where all the filth of other worlds is thrown. The last fancy is in a certain manner original, and for which we are indebted to a Persian witling, who places paradise, the abode of the first human pair, in heaven, in which are to be met with garden-trees now, loaded with the most delicious fruits, whose superfluity, after being eat, loses itself by insensible perspiration; a single tree in the middle of the garden excepted, which bears a charming fruit, it is true, but which cannot be perspired. As our first parents, notwithstanding the prohibition, desired to eat of it; there was, in order that they should not defile heaven, no other advise, than that one of the angels showed them the earth at a great distance, and said, *that is the jakes of the universe*, conducted them thither to do the needful, left them there, and flew back to heaven. Thence sprang the human species upon earth.

foretokens of the last day (for where does an imagination moved by great expectations let tokens and miracles be wanting?) are all of the horrible sort. Some see them in the prevailing injustice, in the oppression of the poor by the gormandizing and excessive luxury of the rich, and the universal loss of truth and faith; or in the flames of bloody wars kindling in all the corners of the earth, in a word, in the moral fall and in the rapid increase of all vices, together with the attending evils, such, as they fancy, as former times never saw. Others, on the contrary, in uncommon alterations of nature, in earthquakes, hurricanes and deluges, or in meteors and comets.

In fact men feel the burden of their existence, not without cause, though they themselves are the cause of it. The reason of which seems to me to be the following. — In the progressions of the human species the culture of talents, of address and of taste (and of their consequence, luxury), naturally forerun the unfolding of morality; and this state is directly the most burdensome and the most dangerous both to morality and to physical well-being: because the wants increase much faster, than the means to satisfy them. But the moral predisposition of humanity, which (like Horace's *poena, pede claudo*) always hobbles after it (humanity), will one day (as may well be hoped for under a wise Governour of the world) overtake it, which entangles itself in its precipitate course and often stumbles; and thus, even according to the proofs of experience of the preference of morality in our age,
in

in comparison with all the foregoing ages, may be indulged the hope that the last day will rather arrive with an ascension of Elias, than with a descent to hell like the gang of Korah, and bring about the end of all things upon earth. This heroical belief in virtue, however, seems to have, subjectively, an influence on the minds not so universally powerful for the purpose of conversion, as that in a scene, which is thought as preceding the last things, accompanied with terroure,

Observation. As we have here to do (or to play) merely with ideas that reason frames for itself, the objects of which (if there are such) lie quite beyond our horizon, which ideas, though to the speculative cognition transcendent, are not in every reference to be holden void, but with a practical view are furnished us by legislative reason itself, not in order to muse on their objects, what they are in themselves and according to their nature, but as we have to think of them for the behoof of the moral principles, directed to the scope of all things (by which they, which were otherwise void, acquire objective practical reality); — thus have we before us a *free* field to divide this production of our own reason, the universal conception of an end of all things, according to the relation which it bears to our cognoscitive faculty, and to classify the conceptions ranking under it.

Accordingly the whole is divided 1. into
Vol. II. Ee the

the *natural* * end of all things, according to the order of moral ends of Divine wisdom, which end we can (in a practical view) *well understand*, 2. into their *mystical* (supernatural) end, in the order of efficient causes, of which we *understand nothing*, 3. into the *preternatural* (perverted) end of all things, which is brought about by ourselves, by *misunderstanding* the scope; and represented in three divisions, the first of which has been just treated and now the two others follow:

‘An Angel lifted up his hand to heaven, and swore by him that liveth for ever and ever, who created heaven &c., that there should be time no more.’ (Rev. x. 5, 6).

Unless it be supposed that this angel ‘with his voice of seven thunders’ (v. 3) intended to speak nonsense, he must have meant that henceforth there shall be no *alteration*; for if there were alteration in the world, time also would be there, because that cannot take place but in this and, without this presupposition, is by no means cogitable.

Here now is represented, as an object of sense, an end of all things, of which we can form to ourselves no conception at all: because we, if we would take a single step out of

* *Natural* (formally) means, what necessarily follows according to laws of a certain order, whichever it be, consequently the moral too, (therefore not always the physical merely). To it is opposed the *unnatural*, which may be either the *supernatural*, or the *preternatural*. The necessary from *causes of nature* is also represented as materially natural (physically necessary).

of the sensible world into the intelligible, unavoidably involve ourselves in a contradiction; which happens here, as the moment that makes the end of the one, must be the beginning of the other, consequently this is brought into the very same series of time with that; which is contradictory.

But we say too that we conceive a duration as *infinite* (as eternity): not because we have any one determinate conception of its length — for that is impossible, as time, as its measure, is totally wanting to it; — but that conception is, because, where there is no time, *no end* has place, merely a negative conception of the perpetual duration, by which we do not advance a single step in our cognition, but it is meant to be said, only, that reason, with a (practical) view to the scope, never can be satisfied on the way of constant alterations: though, if it attempted it with the principle of the stop and of the alterations of the state of mundane beings, it would satisfy itself just as little with regard to its *theoretical* use, and would rather fall into thoughtlessness; as then nothing remains for it but to think of an alteration proceeding to infinite (in time), in the continual advancement to the scope, by which the *mindfulness* (which is not, like that, a phenomenon, but something supersensible, therefore not variable in time) remains and is constantly the same. The rule of the practical use of reason, conformable to this idea, says nothing more, than that we must so take our maxims, as if,

in all alterations going in *infinitum* from the good to the better, our moral state, according to the mindedness, (the *homo noumenon*, whose conversation is in heaven) were subjected to no vicissitude of time whatever.

But that an article of time, when all alteration (and together with it time itself) will cease, shall one day arrive, is a representation shocking to the imagination. Then all nature grows rigid and, as it were, becomes petrified: the last thought, the last feeling in the thinking subject stops then and always remains the same without change. For a being, who can be conscious to himself of his existence and of the length of it (as a duration) but in time, such a life, if it may be termed life, must seem like annihilation: because he, in order to conceive himself in such a state, must cogitate something in general; but *cogitation* contains reflecting, which can happen in time only. — Hence the inhabitants of the other world are so represented, as they, according to the difference of their place of abode (heaven or hell), utter either always the same spiritual song their hallelujah, or eternally the very same lamentation (xix, 1-6; xx, 15): whereby is shown the total want of all change in their state.

This idea, however, though it surmounts our faculty of comprehension so much, is in a practical reference nearly related to reason. If we should even suppose the morally physical state of man here in life on the best footing, namely, a constant advancement

ment and approximation to the chief good (set up as an aim to him); yet he (even in the consciousness of the immutability of his mindedness) cannot combine *contentment* with the prospect of an everduring alteration of his state (of the moral as well as of the physical). For the state, in which he is at present, always remains an evil, comparatively with the better, into which he is ready to enter; and the representation of an infinite advancement to the scope is at the same time a prospect in an infinite series of evils which, though they are outweighed by the greater good, do not allow the contentment, that he cannot conceive but by the *scope's* being finally *reached*, to find place.

The musing man, now, falls into *mysticism* (for reason, as it is not easily satisfied with its immanent, *id est*, practical, use, but willingly ventures something in the transcendent, has its mysteries too), when his reason understands neither itself, nor what it wills, but, rather than confine itself, as becomes the intellectual inhabitant of a sensible world, within its boundaries, extravagates or falls into reveries. Hence comes Laokium's monstrous system of the *chief good*, which consists of *nothing*, that is, in the consciousness of *feeling* one's self swallowed up in the gulph of the Godhead, by the confluence with it and therefore by the annihilation of one's personality; in order to have the presension of which state, Chinese philosophers, in dark rooms, with shut eyes, endeavour to conceive and to

feel this their *nothing*. Hence the *pantheism* (of the Thibetians and other eastern nations); and afterwards *spinozism* generated from the metaphysical sublimation of the former: both which are nearly allied to the very old *system of emanation* of all human souls out of the Deity (and their final *resorption* by him). Merely that men may ultimately have to rejoice in *perpetual rest*, which then constitutes their imaginary happy end of all things; a conception, with which their understanding is at the same time extinguished and all thinking at an end.

The end of all things, which go through men's hands, is, even notwithstanding their good ends, *folly*, that is, the use of such means to their ends, as are directly contrary to these. *Wisdom*, that is, practical reason in the suitableness of its measures fully corresponding to the scope of all things, the chief good, dwells with God only; and to act but not evidently contrary to its idea, is what may be named human wisdom. But this security from folly, which man can hope to receive but by essays and the frequent alteration of his *plans*, is more a *prize*, for which the best can only run so that he may obtain it; but he must never allow self-love to persuade him that he has obtained it, and much less to proceed as if he had. — Hence the from time to time altered, frequently nonsensical, projects for fit means to render religion in a whole nation pure and at the same time forcible; so that it may well be said, Poor mortals, with

with you nothing is constant, but inconstancy!

When these essays, however, have at last succeeded so far, that the commonwealth is capable and inclined to hearken not only to the received pious doctrines, but to practical reason illustrated by them (as it is absolutely necessary to a religion); when the (in a human manner) wise men among the people make objections, not by concerting together (as a clergy), but as fellow-citizens, and for the most part agree therein, which prove, in a manner not liable to suspicion, that their only aim is truth; and the people on the whole (though not yet in the smallest detail), by the universally felt want of the necessary cultivation of their moral predisposition, not built upon authority, take an interest therein: nothing seems to be more adviseable, than to let those pursue their course undisturbedly, as, with regard to the *idea* which they trace, they are in the right way: but as to the consequence of the means chosen for the best scope, since it always remains uncertain how it may fall out according to the course of nature, to leave it to *Providence*. For, let one be ever so *hard of belief*, he must, where it is absolutely impossible to foresee with certainty the consequence of certain means taken according to all human wisdom (which, if it shall merit its name, must refer to the moral entirely), believe in a practical manner in a concurrence of Divine wisdom to the course of nature, unless he would rather chuse to give up his

scope. — It is indeed pretended That it has already been often said that the present plan is the best; it must henceforward be always adhered to: that is at present a state for eternity: *He* (according to this conception) *that is righteous, let him be righteous still; and he that is unjust (contrary to it), let him be unjust still:* as if eternity, and together with it the end of all things, could be already arrived; — and yet always new plans, the newest one of which is often but the re-establishment of an old one, have been since projected, and *more last* schemes will not be wanting for the future.

I am so conscious of my inability of making in this a new and happy essay, that I would (to which indeed belongs no great power of invention) rather advise to leave matters as they are at last, and have proved themselves almost during a man's age tolerably good in their consequences. But as that may not be the opinion of men of either a great or an enterprising spirit; allow me humbly to observe, not so much what they have to do, as against what they must have a care not to offend, as they would otherwise act contrary to their own design (were it the very best).

Christianity, besides the greatest reverence, which the holiness of its laws irresistibly inspires, has in it something lovely. (I do not mean here the amiableness of the person who acquired it for us by great sacrifices, but of the thing itself, namely, the moral consti-

constitution which he founded; for that can be inferred but from this). Reverence is without doubt the first, because without it no true love can have place; though without love one may have a great reverence for a person. But when not only the representation of duty, but its observance is concerned, when one inquires after the *subjective* ground of the actions, from which, if it may be presupposed, may first be expected, what man *will do*, not merely after the objective one, *what he ought to do*; love, as a free adoption of the will of another among one's maxims, is an indispensable complement of the imperfection of human nature (to be necessitated to that which reason prescribes by the law): for what one does not willingly do, he does so sparingly, and even with sophistical evasions of the commandment of duty, that, without the accession of reverence, no great stress is to be laid upon love, as a spring.

But if, in order to make it very good, any one authority (were it even the Divine) is superadded to Christianity, let the intention be ever so well-meant and the end actually ever so good; its amability is gone: for it is a contradiction to *command* any body that he shall not only do something, but that he shall do it *willingly*.

The Christian religion has in view To forward love to the business of the observance of one's duty in general, and produces this love also; because its Founder speaks not in the quality of a commander, who enforces his

will requiring obedience, but in that of a philanthropist, who brings home to his fellow-men their own will well-understood, that is, according to which, they of their own accord, if they sufficiently tried themselves, would naturally act.

It is therefore the liberal cast of mind — equally far remote from servility, and from licentiousness — from which Christianity expects effect to its doctrine, by which it is able to win for itself the hearts of men, whose understanding is already illuminated by the representation of the law of their duty. The feeling of liberty in the choice of the final end is that which makes the legislation lovely. — Though the Teacher of it announces *punishments*, this is not to be so understood, at least it is not suitable to the peculiar quality of the Christian religion so to explain it, as if they should become the springs, to keep its commandments; for so far it would cease to be worthy of love. But, this may be interpreted only as a kind warning, arising from the benevolence of the legislator, to beware of the disadvantage, which must inevitably spring from the transgression of the law (for: *lex est res surda et inexorabilis*. Livius); because not Christianity, as a voluntarily adopted maxim of life, but the law here threatens; which, as an order immutably lying in the nature of things, is not left, even to the arbitrement of the Creator, to decide in this or that manner the consequences of it.

When

When the Christian religion promises *rewards* (for instance, *Rejoice, and be exceeding glad; for great is your reward in heaven*); that must not, according to the liberal way of thinking, be so expounded, as if it were an offer, so to express myself, to *bargain* with men to lead good lives: for here Christianity again were not of itself worthy of love. Only a demand of such actions, as arise from disinterested motives, can inspire man with reverence for him, who makes the demand; but without reverence there is no true love. To that promise then must not be affixed the sense, as if the rewards should be taken for the springs of the actions. The love, by which a liberal cast of mind is fettered to a benefactor, is not directed by the benefaction, which the needy receives, but merely by the goodness of the *will* of him, who is inclined to bestow it: even should he not be possessed of the means, or be hindered in the execution by other motives, which the consideration of the universal good of the world carries with it.

That is the moral amability, that Christianity carries with it, which, by various coactions externally applied to it, has, notwithstanding the frequent change of opinions, still made its way, and supported itself against the aversion it must otherwise have met with; and (what is remarkable) which, during the time of the greatest enlightening that ever was among men, always shows itself in a clearer light.

Should

Should the Christian religion ever be brought to such a pass, as to cease to be amiable (which might well happen, if it, instead of its mild spirit, were armed with imperious authority): an aversion and opposition to it, as in moral things no neutrality (and still less a coalition of opposite principles) finds place, must become the prevailing way of thinking of men; and the *antichrist*, who is over and above holden the harbinger of the last day, would begin his short government (probably founded upon fear and self-interest): then, however, as Christianity was *destined* to be the universal religion of the world, but would not be *favoured* by fate so to be, would happen, in a moral consideration, *the* (perverted) *end of all things*.

F I N I S.

